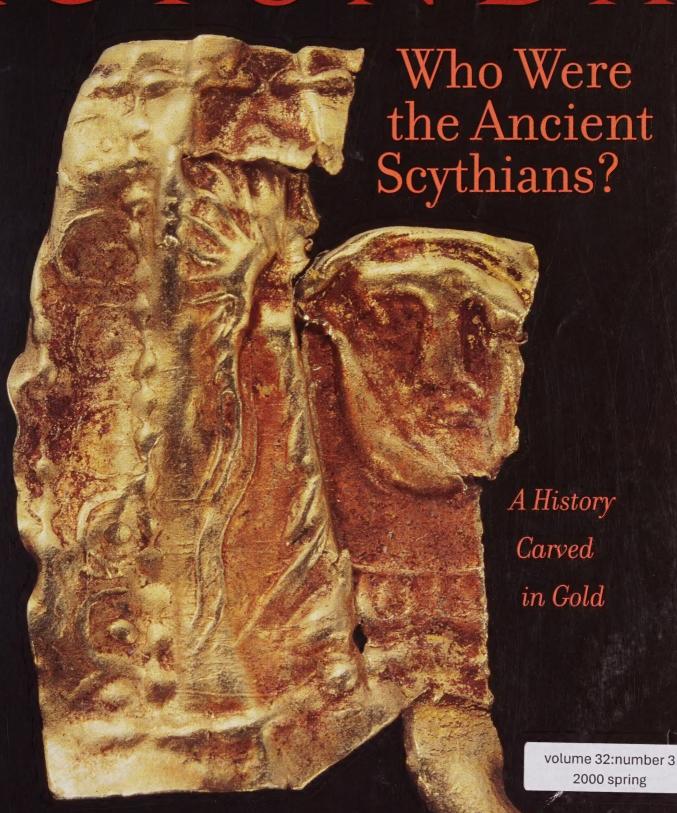
# ROTUNDA



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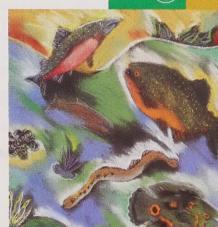
LIFE ON EARTH



**PEOPLES OF CANADA** 



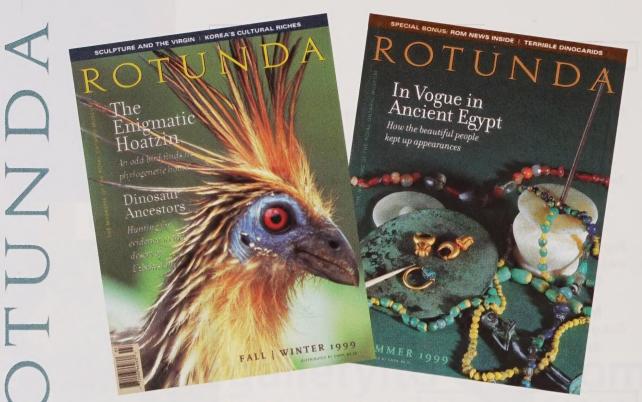
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### LINDSAY SHARP

HAVE RECENTLY decided to return to the United Kingdom and will be leaving the ROM at the end of June 2000. The offer to head the prestigious National Museum of Science and Industry (London) also gives me the chance to move home to be closer to my elderly parents. Although I am delighted at this opportunity, I will be sad to leave the ROM at such an exciting time in the Museum's history.

Upon taking up the directorship of the Royal Ontario Museum in February of 1997, I was given the mandate to work with staff and stakeholders in the Museum community to chart a new future. I am grateful for the opportunity to have assisted in the ROM's ongoing renewal. Over the past three years, I have been delighted to witness the Museum's progress in attracting new audiences, enhancing the museum experience for all visitors, creating new business opportunities, and communicating the stories of the ROM's collections and research—all thanks to the efforts, ideas, and commitment of a great number of individuals.

Last year, the Museum's gallery space grew by 15 per cent (32,000 square feet), with more than 3,000 additional objects and specimens being exhibited. The expansion includes three new hands-on discovery galleries for families and three new galleries that display objects from the Museum's renowned Asian collections.

The new Friday Nights at the ROM program is bringing fresh audience groups to our doors and setting attendance records. We have launched our first-ever weekly television co-production with the Discovery Channel with *Hidden Treasures*, which now reaches approximately 200,000 viewers across Canada. We are in the final stages of signing an agreement with a major publisher.

Also in 1999, we witnessed the success of two major community initiatives: in association with the South Asian community we reached our fundraising target of \$2 million for a new gallery and curatorship; and we opened the Gallery of Korean Art in cooperation with the Korean community.

At press time, we were in the last phase of preparation for Egyptian Art in the Age of the Pyramids, the Museum's most important exhibition in over a decade. When it opens, we will simultaneously break new ground with The Pyramid Makers, a theatrical, learning program for families, which will make aspects of this sophisticated art show accessible to a broader public.

Over the past three years, self-generated operating revenue (from admissions, programs, special events, and fundraising) has grown by 60 percent. At the same time, dependence on government funding, as a percentage of gross operating revenue, has fallen to 58 percent from 70 percent.

Our long-term strategy for the programs, galleries, and exhibitions that will tell the Museum's stories was presented to the Board of Trustees in January. Working from this information, a master planning initiative will assess how the ROM's buildings and land can be developed to meet programmatic, operational, and business needs in the future. During the last six months of my term, I will be working with the Board and the management team to fine-tune these initiatives.

The road to change and renewal is never smooth, and many of the advances we have made came with some tough decisions. A number of longserving employees have moved on, while new recruits have joined, injecting new skills and ideas into the Museum's operations. I am confident that I will leave the ROM with a team of highly skilled and dedicated individuals who have a clear mandate from the Board of Trustees to continue in their efforts to communicate the stories of the Museum's collections and research and to make life-long learning more exciting and accessible for everyone.

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### **LEE-ANNE JACK**

AST SUMMER, ROM Egyptologist Dr. Krzysztof Grzymski was conducting archaeological field work in Sudan, the modern-day site of ancient Nubia, when he spotted a scattering of potsherds of unfamiliar construction. These fragments, which undoubtedly would have seemed inconsequential to the casual passerby, indicated to him that a previously unknown civilization had occupied the territory. In this issue of Rotunda, Dr. Grzymski chronicles his discovery of a people believed to be the ancestors of the great rulers of Kush, and how they fit into the broader history of this kingdom of the Nile.

While it is an important breakthrough in scholarly circles, more than archaeologists and historians are excited about the project. The ongoing excavations that will help Dr. Grzymski to piece together the missing links in Nubian history will also assist Sudan in preserving its heritage and provide much-needed jobs for local workers. The project has been named by UN-ESCO as an official activity of the United Nation's Decade for Cultural Development. Dr. Grzymski's is one of many ROM projects that contribute culturally and economically in the dozens of countries in which the Museum conducts research.

Field projects also provide training for future generations of researchers. University of Toronto zoology and botany students can now participate in field courses taught by ROM curators in Vietnam, a country of astonishing biodiversity. The program was initiated in 1995 by Dr. Bob Murphy and Dr. Doug Currie of the Museum's Centre for Biodiversity and Conservation Biology and operates in conjunction with research projects undertaken jointly with Vietnam's Institute of Ecology and Biological Resources.

One of the field instructors, ROM entomologist Dr. Chris Darling, turns

his attention closer to home in this issue as he discusses the incredible interrelated insect life to be found on the goldenrod of Toronto's Leslie Street Spit. He and graduate student Cara Gibson document the awe-inspiring struggle for life between gallmakers and their foes, the wasp parasitoids. After seeing the details revealed under Dr. Darling's microscope, you'll be grateful not to have a bug's life.

In our cover story, curator Krzysztof Ciuk of the ROM's Department of Near Eastern and Asian Civilizations looks at the art and culture of ancient Scythians. The tombs of these nomads were not discovered until the early 18th century. Though much less well known than the treasures from Egyptian tombs, the remarkable golden artifacts that were retrieved from these burial places reveal much about Scythian life and the influence exerted by their neighbours, the Hellenes, after they settled on the shores of the Black Sea.

Dr. Peter McNeil, a recent Veronika Gervers fellow at the Museum, studied the ROM's collection of menswear for his doctoral thesis on macaroni dress—flamboyant fashions worn by ultra-chic British men in 1760 to 1780. The apparel was frequently ridiculed by peers and accused of undermining British patriotism and threatening masculinity itself. Dr. McNeil examines macaroni dress in the light of political, social, and medical discourse of the times.

I hope that in reading this issue of Rotunda you'll enjoy the exciting discoveries that are being made by our curators in the worlds of art, archaeology, and science.

For those *Rotunda* readers who are not Members of the ROM, please bear with us. Some of you may have experienced difficulties with your subscription as we moved from an outside to an in-house fulfilment service. If you have questions or require assistance, please call Sandra Piller at (416) 586-5758.



**Dr. Krzysztof Grzymski**Department of Near Eastern
and Asian Civilizations

r. Grzymski (Nubia Before the Pyramids) is senior curator of Egyptology and has carried out excavations in Nubia since the early 1980s. He was the key scholar in developing the ROM's Nubian Gallery.



**Dr. Chris Darling** 

Centre for Biodiversity and Conservation Biology

r. Darling (Life and Death on the Leslie Street Spit) is a senior curator of entomology. His research focuses on the systematics and biology of parasitic wasps. When not conducting fieldwork in tropical forests, he can often be found poking around in the goldenrod fields along Toronto's lakeshore.



Krzysztof Ciuk

Department of Near Eastern and Asian Civilizations

rzysztof Ciuk (Gold of the Nomads) is assistant curator and has excavated many prehistoric sites. His background is in Central and Eastern European archaeology.



#### Cara Gibson

Centre for Biodiversity and Conservation Biology

s. Gibson (Life and Death on the Leslie Street Spit) is a research assistant at the ROM and a recent graduate of the Zoology Specialist Program at the University of Toronto. Her honours thesis project examined goldenrod tritrophic interactions at the Leslie Street Spit.



**Dr. Peter McNeil** 1998 Veronika Gervers Fellow

r. Peter McNeil (Mocking the Macaroni) is lecturer in design history and theory at the College of Fine Arts, University of New South Wales, in Sydney, Australia. He was the 1998 Veronika Gervers Fellow at the ROM. The subject of his PhD was a study of the macaroni.

### GENERAL INFORMATION ROYAL ONTARIO MUSEUM

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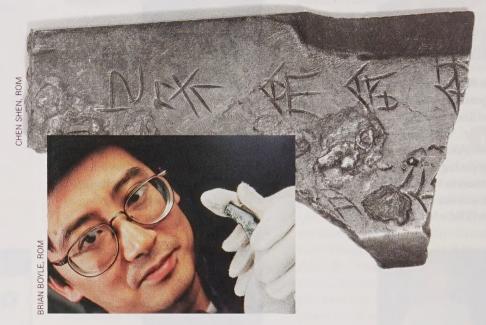
### EARTH AND COSMOS | LIFE ON EARTH | CULTURE



# Hooked on Botany

Realistic hues grace Cheticamp rug

HE PROVINCIAL and territorial flowers adorning this hooked carpet, which graces the Governor-General's official residence, Rideau Hall, were rendered in accurate hues thanks to a set of 22,000 slides from the botany section of the ROM's Centre for Biodiversity and Conservation Biology. The slides, which were shot by noted naturalhistory photographer Mary Wyndow Ferguson, were consulted as colour guides by the six Cheticamp craftspeople who worked the rug. They hooked 36 to 40.5 kilograms (80 to 90 pounds) of wool in 132 hand-dyed colours onto monk's cloth using some 4 million stitches.



### Words of War

 ${\it Cracking the code of a Chinese weapon's origins}$ 

T MAY NOT LOOK impressive, but this fragment of a bronze ge (pronounced guh), a long-shafted killing weapon used exclusively in ancient China, is important because of the inscription incised upon it. Though the imprint is incomplete, the nine remaining characters were recognized and translated by visiting scholar Dr. Hui Fang from the Shandong University in China. Clearly a manufacturing mark, it provided enough clues to determine exactly where and when the weapon was made. During the "Warring-States" period in Chinese history (475–221 BC) when intensive warfare raged among city states seeking to enhance their own power at the expense of the central gov-

ernment, manufacturing of weaponry became a state affair. A three-level hierarchy was typical-a state administrator inspected the products, a master craftsman supervised each foundry, and craftsmen cast individual pieces. Each state had a distinctive inscription style. One of the most powerful of manufacturers was the Han State, which occupied territory in today's southern Shanxi and western Henan provinces. The marks on the ROM's artifact correspond exactly to one of the Han styles. The order in which names were inscribed tells us that the ROM's ge was manufactured in the ninth year of a king, at a town called Jing, cast by craftsman "X," mastered by the supervisor named You,

and inspected by state administrator Fu. The craftsman's name will remain forever unknown due to a breakage in the metal. But the missing king's name can be surmised. This inscription style arose at the beginning of the 3rd century BC, meaning the weapon must have been made during the reign of either King Huanhui or King Wang'an. History books tell us that the Han State was occupied by the Qin State prior to the ninth year of Wang'an's reign, making it doubtful that a Han inscription style would have been used. It is likely, therefore, that "ninth year" refers to King Huanhui's reign, making 264 BC the precise date of the ge's manufacture.

Chen Shen

## TIONS

### ART AND DESIGN | PEOPLES OF CANADA

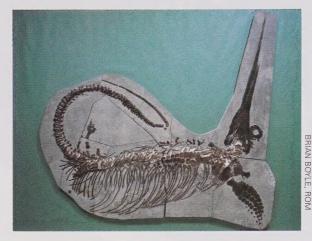


### Tiny Tent Makers

Vietnamese caterpillars dine in style

N THE TROPICS of ecologically diverse and relatively unexplored Vietnam, much remains unknown about the natural history of even the most common insects. New species are regularly being discovered. But that doesn't diminish the exhilaration of detecting something for the first time, such as this extraordinary tent-making caterpillar. I initially encountered the insect while teaching a field course in Vietnam in 1997. Although the moth, or adult stage, is known as Calindoea trifascialis, the caterpillar itself and its behaviour has never before been described by science. What makes it unusual is the shape of the dining structure it creates. This caterpillar uses its mandibles to chew a half-circle-shaped incision through a leaf of the common tree Dipterocarpus tuberculatus. It then hoists the cut portion overhead and, using silk extruded from its mouthparts, attaches the cut edge to the leaf's surface to form a high, conical tentwith itself conveniently positioned inside. There, it feeds on the tissues of the leaf's upper surface, skeletonizing it (inset). When finished, it chews its way out and quickly constructs a new, larger tent. Why does C. trifascialis expend so much energy on temporary dining quarters? Possibilities include protection from the elements - the sun is fierce in the open woodlands frequented by the caterpillar - and concealment from enemies.

Chris Darling

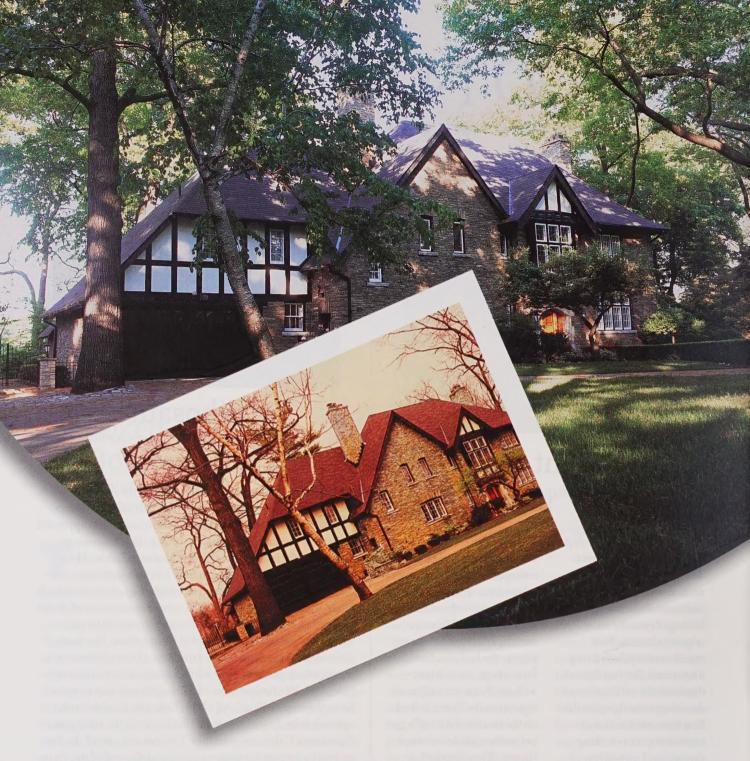


### Excalibosaurus

An ichthyosaur of legendary proportion

оме 200 міllion years ago, during the Age of Reptiles when dinosaurs roamed the Earth and pterosaurs ruled the air, this unusual ichthyosaur first appeared in Earth's oceans. Ichthyosaurs, or fish-lizards, were so named for their superficial resemblance to fishes. Most have streamlined bodies with fish-like fins and large crescentic tails like modern tuna, although they are more closely allied with the lizard family. The rare species pictured above belongs to a genus called Excalibosaurus, named by me in 1986 after the legendary sword of King Arthur. The name derives from the sword-like extension of the ichthyosaur's snout, which gave the now-extinct beast an extensive overbite. And, like Arthur's sword, this specimen was retrieved from the stone of England's West Country. Excalibosaurus appears to be an intermediate link between the ichthyosaur Leptonectes ("slender swimmer"), which was one of the few genera to survive the mass extinction at the end of the Triassic, and the geologically later ichthyosaur called Eurhinosaurus. Eurhinosaurus had an even more pronounced overbite than Excalibosaurus, and was a reptilian analogue of the modern swordfish. This almost complete Excalibosaurus skeleton, which was recently acquired by the Museum, measures some 7 metres (23 feet) in length. The only other example in the world is housed in the City of Bristol Museum and Art Gallery in England. It is much smaller and not so complete as this one, comprising only a skull, a forefin, and a few smaller elements. Adapted from the book Louise Hawley Stone: A Life and Legacy.

Chris McGowan

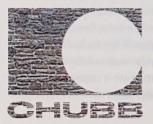


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was an expensive and valuable commodity that allowed its owner to travel and engage in sport, and conferred an advantage in combat.

### KR7YS7TOF CIUK

In the Asiatic equestrian tradition cultivated by Persian, Turkic, and Tatar cavalrymen, a horse's importance and the wealth of its owner were proclaimed by the splendour of its gear. In the 16th and 17th centuries, Ottoman Turkey developed lavish horse trappings and accoutrements that became extremely popular, not only among the Ottomans themselves, but all across Europe. Oriental design was very fashionable, and embroidered caparisons, or saddle blankets, such as the newly acquired ROM example pictured above, were highly coveted exports



Egyptian Donkey Plaque from the tomb of Metjetjy late 5th Dynasty ca. 2350 B.C.

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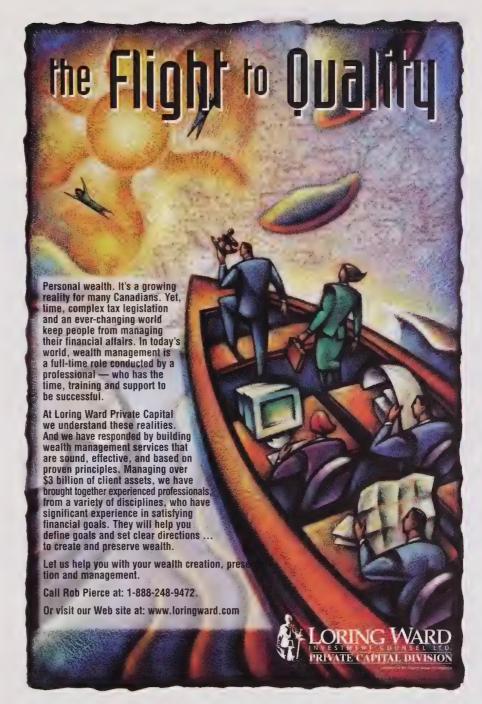
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from the Ottoman Empire. They were sold with quadruple markup in the markets of Lvov, Cracow, and Budapest, often costing more than the horses that would wear them.

Contemporary illustrated accounts and Western and Oriental iconography record numerous colourful images of pomp and pageantry prominently displaying the trappings of horsemanship: shields and swords attached to luxurious brocaded saddles, buckled-on embroidered quivers and bows, and spectacular caparisons dripping with gold, silver, and jewels. Ceremonial parades at the time were sometimes so extravagant that their grandeur overshadowed the art of equitation itself. At the coronation ceremony of John III Sobieski of Poland. for example, the king rode a horse outfitted in trappings that had once belonged to Hussein Pasha (a general and intimate friend of the Turkish sultan Murad IV), whom he had defeated in battle in 1676. The caparison was made of pure gold and studded with 2000 rubies and emeralds.

European enchantment with Oriental horse trappings began in the 14th century, when Muslim Turks arrived from central Asia to build their empire on the ruins of Byzantium, making themselves the unwanted next-door neighbours of the Christian Europeans. Hostilities flared, fueled by mutual missionary zeal, as each side attempted to convert the other to its own faith. For more than 200 years, holy wars preoccupied the minds of sultans and kings, chancellors and viziers, and army commanders on both sides. Not surprisingly, fine armaments, caparisons, and tents were highly prized as the spoils of battles with the wealthy Ottomans. Jan Chryzostom Pasek (1636-1701), a squire of the Commonwealth of Poland and Lithuania and a veteran of wars with Sweden and Turkey, put it this way: "Agreeable and alluring for everybody should be a war with Turkey: I do not regret risking my skin if I know that, having won, I'll have wherewith to buy bandages and bind my wounds."



### COMING IN THE FALL 2000 ISSUE

# OTUNDA

# The Cult of Dionysos

Paul Denis examines the god, his cult, and his gift of wine to the ancient Greeks.









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By the 16th century, animosity was turning to curiosity and mutual fascination, and evidence of contact between the two cultures was seen in the clamour not only for Turkish caparisons but for everything from costume to gastronomy. Images of Europeans in oriental costume, likenesses of the sultans, and other Middle Eastern imagery crept into the paintings of the European baroque and Renaissance. In Turkey, affluent Ottoman houses (serai) were embellished with Western baroque art, and locally manufactured silver and gold objects began to echo the styles of Italy and Augsburg.

Then, in September 1683, the Ottoman Empire once again attempted to invade Europe, this time attacking Vienna. As the capital of the Holy Roman Empire, it was the very symbol of Christianity. The Turkish Grand Vizier Kara Mustafa laid siege with an army 200,000 strong, but was defeated by troops of German, Austrian, and Polish regiments commanded by the Polish King Sobieski. The camp of Kara Mustafa fell into the hands of the victors along with all the effects it contained: Turkish and Persian carpets, exquisite caparisons, horse trappings, and armaments.

Most of the fine Ottoman objects found in European museum collections today were taken during the second half of the 16<sup>th</sup> and the 17<sup>th</sup> centuries. The best caparisons seized by Sobieski's army were donated to churches as thanksgiving ex votae, where some have been altered into vestments. Most are now housed in the Czartoryski Museum in Cracow and in the Badisches Landesmuseum in Karlsruhe. Some of the saddles, accoutrements, and caparisons are attributed to particular men who took part in the battle. In the Cracow collection there are accoutrements of hetman (high commander) Sieniawski, a beautiful Turkish saddle attributed to hetman Lubomirski (one of the victors from Vienna), and even a stirrup that belonged to Grand Vizier Kara Mustafa, sent by Sobieski from Vienna with news of the victory, complete with the king's seal attached to prove its authenticity.

The ROM's caparison most closely matches one in the Czartoryski collection in Cracow, part of a set described as "a saddle and caparison after Christopher Leopold Schaffgotch," commander of the Silesian regiments of the imperial army at Vienna. This caparison and the ROM's example are almost identical in shape, with a rectangular saddle pad and a trapezoid croup cover. They are similarly patterned with good-quality dense embroidery. The dynamic style of tulip ornament enclosed in formal, geometrical frames, and the fine needlework are closely related to metallic embroideries from Bursa, a city located in the Anatolian part of Turkey, which produced imperial quality fabrics and garments for the sultan, his harem, and the court. A similarly decorated kaftan in the collection of the Topkapi Museum in Istanbul is dated to the first half of the 17<sup>th</sup> century, suggesting the ROM's piece likely dates to the same period.

Made of burgundy-red cotton velvet embroidered with silver wire over the entire surface, the ROM's Ottoman caparison is typically luxurious. The main side panels are decorated with stylized leafy tulips and bordered with a scrolling vine and rosette frieze, which also surrounds the emerald-green velvet saddle pad. The pad is decorated in all four corners with embroidered appliqué escutcheons. The silver and gold wire embroideries are completed with pink, emerald, and blue silk thread. The object is in its almost original condition; even the red braid with long fringes, judging from analogies, may be original. This rare and valuable artifact is the founding piece for the possible future recreation of an awe-inspiring sight—a horse in full Ottoman regalia.

Krzysztof Ciuk is assistant curator in the Department of Near Eastern and Asian Civilizations, specializing in Central and Eastern European archaeology.

#### LIFE ON EARTH

### ESCAPED EXOTICS

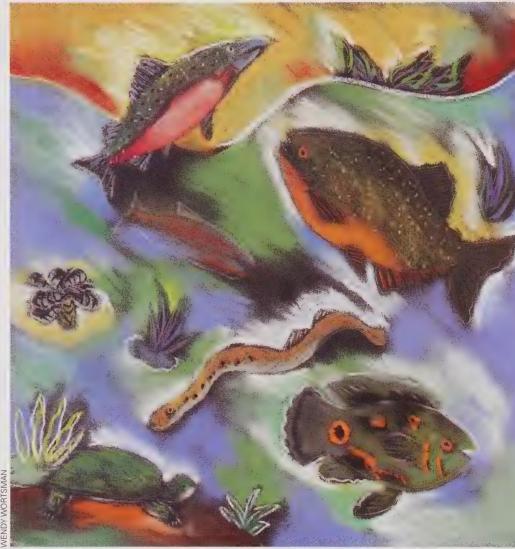
Released aquarium pets and other non-native trespassers can wreak havoc on local ecosystems

AVE YOU EVER wondered what aquarium hobbysists do with their tropical fishes when they grow tired of them? A look in some of our local lakes and rivers will give you a pretty good idea. In the past few years, the Centre for Biodiversity and Conservation Biology has been called in to identify such species as a red-bellied piranha (Pygocentrus nattereri) caught in Professor's Lake near Brampton, an oscar (Astronotus ocellatus) caught in Sturgeon Lake near Fenelon Falls, and a suckermouth catfish (Pterygoplichthys pardalis) taken from Duffins Creek in Ajax, just to name a few.

These fish species are native to Central and South America and do not belong in Ontario's rivers and lakes. Too often, people release pets that may have grown too large for their containers or that have become too prolific into nearby water bodies thinking it is the humane thing to do. Amphibians, reptiles, molluscs, and plants often suffer the same fate.

What people may not realize is the impact these aliens have on the local ecosystem. While many immigrants don't survive our cold Canadian climate, others find the conditions ideal and are able to reproduce and even thrive.

The most obvious consequences of introduced plants and animals are predation, competition for food and spawning grounds, habitat alteration, and the introduction of new diseases

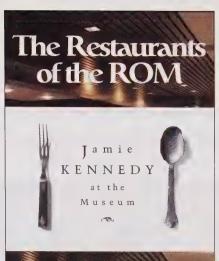


and parasites. The exotics may also have a genetic effect on local populations if interbreeding occurs.

Over the past 100 years, the extinc-

### MARY BURRIDGE

tion of 27 species and 13 subspecies of North American fishes has been attributed to the influx of non-indigenous aquatics. These extinctions cannot all be blamed on aquarium releases, of course. Intentional introductions for sport fishery is also a factor. Over the past 30 years, for example, the Great Lakes have been stocked with coho (Oncorhynchus kisutch) and chinook (O. tshawytscha) salmon, species originally from North America's west coast. Such introductions are considered beneficial, at least on an economic scale, as they bring in mil-





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lions of dollars in revenue annually. The sport fishery is also responsible for baitfish introductions, which occur through spillage or dumping of bait buckets. It is estimated that 12 non-indigenous species have been introduced into Ontario waterways from bait buckets.

Unintentional introductions often have very serious impacts. The sea lamprey (*Petromyzon marinus*), which invaded Lake Erie and the upper Great Lakes when the Welland Canal was opened in 1829, is responsible for the near extinction of the native lake trout, which it parasitizes. Each lamprey can kill about 20 kg of fish during its lifetime. The problem continues today, and the U.S. and Canada jointly spend approximately \$10 million annually on control and research.

The exotic species that has caused the most damage to date in North America is likely the zebra mussel (Dreissena polymorpha). This mollusc travelled from the Caspian Sea in the ballast water of foreign ships and was unintentionally introduced into Lake St. Clair in 1985. Within two years, it had spread throughout the Great Lakes, and by 1991 it had found its way into the St. Lawrence and Mississippi river systems. The mollusc is small, usually considerably less than 2 cm in diameter, but because of its amazing fecundity it can produce more than a million eggs per year in its two- to three-year life span. It is not unusual to find 100 zebra mussels stacked together in a single square centimetre. Such a concentration can cause massive alteration to aquatic ecosystems. The mussel feeds by filtering plankton, bacteria, and protists from the water, thus competing for the same food source as native species of mussels and fishes. Changes in fishspecies composition and an increase in both water clarity and numbers of macrophytes (acquatic plants) have been attributed directly to the zebra mussel's filtering capabilities. The zebra mussel also blocks water-intake pipes. Clean-up and control costs incurred by electrical generating stations and municipal water systems are estimated at \$70 million over the past decade thanks to the zebra mussel.

In Canada there are several regulations and policies to prevent unwanted aquatic species from entering the country. Intentional introductions, such as stocking for the sport fishery, are governed by the federal Fisheries Act. The use of live bait is regulated by the provinces. The draining of ballast water is monitored through voluntary guidelines under the Canada Shipping Act.

Unfortunately, the aquarium trade, which has an estimated global retail value of \$2 billion annually and imports 150 million exotic freshwater and marine fishes into North America each year, remains unregulated. But at a grassroots level, common-sense actions can be taken to avoid problems with unwanted aquatic pets. Many pet stores are willing to accept unwanted tropical fishes for resale or trade. The Ontario Herpetological Society will arrange passage back to Florida for turtle species native to the state. Several organizations in Ontario, including the Canadian Association of Aquarium Clubs, the Ontario Ministry of Natural Resources, the Ontario Federation of Anglers and Hunters, and the ROM, have established a Fish Rescue Hotline to help reduce unwanted aquarium introductions. The hotline number is 1-800-563-7711. Hobbyists might also consider donating unwanted pets to a school, nursing home, or hospital, or giving them to another enthusiast.

For those who might be tempted to release a pet back into the wild as an act of kindness, it is important to think about the repercussions this might have on the biodiversity of the native ecosystem. The slogan of the American Native Fish Conservancy is "Save a native, eat an oscar." Maybe this isn't such a bad idea.

Mary Burridge is assistant curator of ichthyology in the ROM's Centre for Biodiversity and Conservation Biology and coordinates public programming for the new gallery Hands-on Biodiversity.

### CULTURE, ART AND DESIGN | PEOPLES OF CANADA | EARTH AND COSMOS

### Mummies, Millennia, Muses

### I Am the Mummy Heb-Nefert

Eve Bunting
Illustrated by David Christiana
(Tundra, Cloth: \$17.95)
The Museum's shops are well stocked
with Egyptiana this spring in connection with Egyptian Art in the Age of the

Pyramids, the international tour de force shared by the Louvre, the Met, and the ROM. The shops' treasures include this magically illustrated children's book, the "I" witness account of the beautiful (and fictional) Heb-Nefert. As her story unfolds—as

if in details from ancient friezes redefined in watercolours—the Nile becomes a tributary of the metaphorical "stream of time." In a palace on its banks, she dances seductively for the Pharaoh's brother. As his consort, she is dressed by serving girls,

### FEATURE REVIEW

### The Canadian Encyclopedia

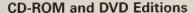
James Marsh, ed. (McClelland & Stewart)

### **Year 2000 Edition**

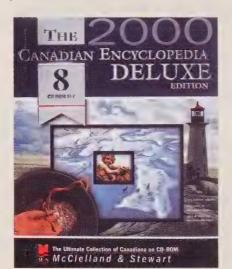
(Cloth: \$64.99)

Canadians dissatisfied with "world" encyclopedias that offer only token Canadian content will welcome the 2000 series of the definitive Canadian work. The earliest editions of the encyclopedia combined text and images in multi-volume boxed sets. Over the past decade, evolving multimedia technologies and the proliferation of home PCs added to the ways in which information could be accessed. At the same time, the success of monolithic bookstores occu-

pying entire city blocks confirmed that the book is more popular than ever. Cognizant of the audiences for both print and electronic media, McClelland & Stewart has evolved authoritative book and electronic versions of its celebrated encyclopedia. The editions work well independently and in combination. The print edition is a Canadian reference library in itself—4 million words, 10,000 articles, 2,640 pages. The largest trade book ever published in Canada, it is the leading reference work on Canadian painting, art, and architecture, as well as a superb resource on Canadian law.



The Electronic editions are experiential and interactive. The 2000 Canadian Encyclopedia: World Edition (4 CD-ROMs: \$89.99), includes 11,000 sound clips, 250 videos

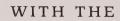


and animations, 38 panoramas, and 8,200 Web links. Along with the text of the print edition (bilingual English/French), it incorporates The Hutchinson Multimedia Encyclopedia, The Canadian Oxford Dictionary, The Globe and Mail Style Book, The Gage Canadian Thesaurus, and the Concise Larousse French/English and English/French Dictionary, as well as a timeline of Canadian and world events, a separate disk on the prime ministers of Canada, and periodic updates of both the program and contents via the Internet. The 2000

Canadian Encyclopedia, Student Edition (2 CD-ROMs: \$34.99) selects many of the best features of the world edition along with 5,000 articles written in easy-to-understand English. Designed especially for students up to Grade 9. The 2000 Canadian Encyclopedia: Deluxe Edition (8 CD-ROMs: \$139.99) adds to the world edition four more Canadian disks—The War of 1812: Bravery and Betrayal; Klondike Gold; Masks: Faces of the Pacific; and Parliament VR. The 2000 Canadian Encyclopedia: DVD Edition (1 digital video disk: \$139.99) offers the equivalent of nine CD-ROMs on one disk. Adapted from the deluxe edition, the DVD version adds the 80-volume Canada's Visual History; the philatelic Stampville, the ultimate (electronic) Canadian stamp collection; and Flypast, the romance of Canadian aviation—from the Silver Dart to the Avro Arrow.

COMPILED AND REVIEWED BY GLEN ELLIS





### **PHARAOHS**

 $\leftarrow$  AT THE  $\rightarrow$ 

### CAIRO CAFE:



Chef Jamie Kennedy proclaims a bounty at the ROM. Partake of the foods of Egypt until May 22nd, when the last sun sets upon the exhibit. Sample the cuisine of the Pharaohs each day while the sun is high: from 11:00 am – 3:00 pm. Supper every Friday until 9:30 pm. Licensed. Reservations and groups call (416) 586-5572.



### Royal Ontario Museum

This exhibition has been financially assisted by the Ontario Cultural Attractions Fund of the Government of Ontario, through the Ministry of Citizenship, Culture and Recreation. The exhibition was organized by the Royal Ontario Museum (Toront), the Metropolitan Museum of Art (New York), and the Réunion des Musées Nationaux (Paris). The ROM is an agency of the Government of Ontario.

Pharenh Merikaure and a Queen (detail), Carywacke, height 139 cm. 4th Dynasty, about 2490-2472 Ex. Museum of Fine Arts, Boston. Harvard University, Museum of Fine Arts Expedition, March 2, 1911. Photography: Bruce White. © Museum of Fine Arts, Boston.

THE GLOBE AND MAIL

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coiffed, and bejewelled, an ornament of wealth and power.

Life dissolves into halcyon days on the Nile. Time passes. Day changes to eternity and she is carried by barge "through streams of stars." Preserved for the ages, her body becomes the mummy Heb-Nefert, her earthly beauty captured in paint on her case.

Wistful and reflective, Caldecottwinner Bunting's newest work quests after permanence—especially of beauty —in an impermanent world. David Christiana's images are suffused with luminosity—as if light itself were a pigment of his paint.

Also in the ROM shops: Egyptian Art in the Age of the Pyramids, (The Metropolitan Museum of Art/Abrams, Paper: \$84.95); Egyptian Hieroglyphs Poster, N. B. Millet, illustrated by Douglas Champion, ROM, \$7.50; Ancient Egyptian Ships Poster, N. B. Millet, illustrated by Douglas Champion, ROM, \$7.50; Ancient Egypt and Nubia (Galleries of the Royal Ontario Museum), Roberta Shaw, Krzysztof Grzymski, ROM, \$9.95.

### The Story of Time

Edited by Kristen Lippincott (Merrell Holberton, Cloth: \$70)

The twilight of the old millennium and the dawn of the new are focusing considerable attention on time, its progress, and its measure. This compendium of essays explores the topic through world cultures, past and present. Among the works excerpted is John MacDonald's The Arctic Sky, the ROM/Nunavut Research Institute book about Inuit astronomy, star lore, and legend. The ancient Inuit eco-calendar was based on seasonal and predictable patterns of recurrence in the natural world. Traders brought clocks-radical devices arbitrarily dividing the day into hours, minutes, and audible seconds: "Time's passage, in ever-decreasing divisions could now be measured, seen, and even heard, in a context quite removed from the tempo of the natural world." Or, as an Inuit office worker recently observed: "Time is nine to five."

Other contributors include novelist and literary scholar Umberto Eco, scientist-philosopher Stephen J. Gould, and art historian-theorist E. H. Gombrich. The 250+ full-colour images range from the ancient world to astrophotography.

### The Gardens of William Morris

Jill Duchess of Hamilton, Penny Hart, & John Simmons

(Stewart, Tabori, & Chang, Cloth: \$57) English IVY, Holly, primrose, and blackthorn; red campion, wild thyme, spear thistle, and Scotch broom; water avens, honeysuckle, meadowsweet, and wild strawberry . . . . The list reads like an incantation, conjuring the English countryside, but these are only a few of the botanicals woven into the designs and planted in the gardens of Arts & Crafts Movement founder, William Morris. In his writings and lectures Morris advocated the cultivation of indigenous species in garden design, arguing that areas are naturally characterized by particular and often distinct combinations or patterns of flora, making them individual, sometimes unique. This ethos extended to his use of local stone, clay, and woods in building materials.

Full colour throughout, the work explores Morris's gardens at his various dwellings—the Red House, Kelmscott Manor, Kelmscott House, and Morris & Co. at Merton Abbey—juxtaposing plants from the artist's gardens and riversides with his interpretation of them in his designs for textiles and wallpaper.

A book of many plots, not least among them is the subplot involving Morris's wife, Pre-Raphaelite supermodel Jane Burden. The subject of Dante Gabriel Rossetti's *The Day Dream* (exhibited at the ROM as part of *A Grand Design: The Art of the Victoria and Albert Museum*), she posed for 53 of Rossetti's paintings in total. She was also his paramour, seeming to confirm the horticultural adage that where there are roses, there are also thorns.

Glen Ellis is head of Publications, Royal Ontario Museum



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# Gold of the

Scythian treasures reveal the influence of ancient Greece



THE TOMBS OF THE ANCIENT SCYTHIANS lay undisturbed for more than a thousand years, holding the relics of a forgotten civilization and a wealth of masterpieces in silver and gold. Discovered in the early 18th century during the reign of Czar Peter the Great, these treasures were the first physical traces of the Scythians, a nomadic people who until then had been known only through the writings of classical scholars.

The countless barrows or kurgans—the underground tombs of Scythian and Sarmatian nobility-were located on the watersheds of the Dn'epr, Don, and Kuban' rivers in  $\stackrel{\scrip}{\mathbb{E}}$  Ukraine, and Peter the Great, an enthusiast of antiquities



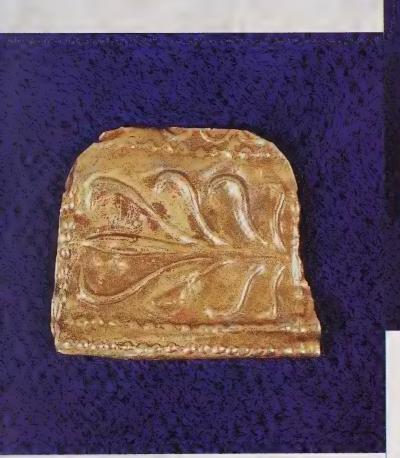
and supporter of exploration, ordered the excavation of the most prominent mounds. Many more were discovered and excavated by professionals and amateurs in the 18th, 19th, and 20th centuries, providing museums and collectors with a wealth of magnificent items.

The best-known artifacts-incredible golden knives and other objects, extraordinary examples of zoomorphic decorations, and realistic scenes of everyday life of the nomads-were uncovered from the kurgans of Kul Oba, Tchertomlyk, Solokha, the necropoli of Khersones, Maikop in the Crimea, and many other sites ranging from the Danube to the Caucasus. Though the Scythians had no written language, their history is recorded in a captivating and realistic visual narrative of pure gold.

Scythian history spanned a millennium and a half, from the 12th or 11th century BC to the 4th century AD, and unfolded across a geographic area larger than North America. Like many other nomadic peoples of the past, the Scythians ≥

# omads

By Krzysztof Ciuk



From left to right: The openwork plaque with hunt scene from the 4th century BC was made after the Scythian migration to the Black Sea. In their ancestral homelands, stags were sacred. The pendant with gold filigree and polished cabochons dating to the 4th or 5th century BC is only about the size of a quarter. This thumbnail-sized piece of gold with palmette pattern is likely part of a belt clasp. The face of Alexander the Great adorns this tiny fibula (brooch) dating to the 4th century B.C.

were well aware of their place in nature. In the beginnings of the 1st millennium BC, they still inhabited a vast, inhospitable area, the plateaus of inner Asia and the plains of southern Siberia, where the short summers and long, cold winters could not support agriculture. Their livelihood depended instead on animal pasturing and hunting.

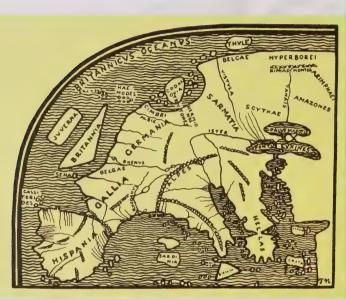
The simplicity of early social institutions guaranteed cohesiveness and efficiency in the mobile groups. Under the reign of a single ruler, Scythian society was composed of priests, warriors, shepherds, drovers, and hunters, and most likely a group of craftsmen who produced the golden treasures and the tools of everyday life. Their strong tribal system, based on a kinship that extended from the nearest relatives of the ruler to other families related by blood, derelatives of the ruler to other.....

termined their social and military organization.

The vast distances travelled by the nomadic Scythians as they drove their herds across the Asian landscape can be imagined when one considers that the nomadic Kazakhs, who today occupy a similar area of the world, were still, as recently as the 18th and 19th centuries, moving their herds an astounding 1000 to 1500 kilometres seasonally. We know from excavated remains that the Scythians had wheeled carts pulled by oxen, which they likely used to carry with 33 them entire households.

But sometime during the 8<sup>th</sup> century BC, unknown events triggered a more long-lasting migration towards the West, where the Scythians eventually settled permanently. A

### The Royal Scythians embraced the He dwellers and emulating the ways of their neight



dry spell that continued for seven centuries, from 1200 to 500 BC, had led to the formation of steppes in their inner Asiatic homeland, creating conditions favourable for raising livestock and forming new areas of pasture land. Since there are no records indicating violent occurrences, we can only speculate that significant growth of the herds caused severe shortages of suitable pasture, forcing some groups to look farther westward for better living conditions.

With the migrating herdsmen went the tribes' warriors, free men who were fed and clothed, but whose wages consisted only of a share in whatever was taken from the enemy. The Scythians and other waves of nomads were likely drawn towards Eastern Europe, tantalized by the wealth that was there to be looted. Within each tribe, a sui generis aristocracy commanded, either through sheer force or an advanced social position within the group, a larger share of whatever booty could be taken. Evidence of human sacrifices and hundreds of horse sacrifices found buried in some kurgans attests to the existence of this higher stratum of society. (The kurgans also reveal that there was a hierarchy among the three kingdoms of Scythians-Royal Scythians ranked above Nomad Scythians, who in turn ranked above Ploughmen Scythians.)

As they moved into new regions, warriors would send advance scouts to spy on sedentary populations whose riches they coveted. This was a precursor to the invasion that invariably followed. Any internal discords, tribal partitions, lack of leadership, or other symptoms of weakness that could be detected



in advance improved their chances of a successful attack.

These Scythians may sound familiar, as it was this aspect of their history that preoccupied ancient scribes. The Greek historian Herodotus, the Greek geographer Strabo, the prophet Jeremiah, and other authors describe Scythian men of war as cruel, blood-drinking monsters, who fashioned drinking cups o from their enemies' skulls (for the curious: by cutting off the calvaria). In German, the expression Parter und Skythen (Parthians and Scythians) is synonymous with horror.

The account by Herodotus of a war waged against the Scythians by Darius, the king of Persia, at the beginning of the 6th century BC is the first detailed description on record of this great nomadic empire. According to Herodotus, the Scythians took up residence in the territory of today's Ukraine. A group identified by him as the Plough- ⊼ ≥

### lenic lifestyle, eagerly becoming rich city

ours.





Far left: Map of Europe according to the description of Pomponius Mela. Middle: This sword and scabbard from the 4th century BC depicts both the Greek god Pan and a typically Scythian stag. Above: A view of Alexandropol Barrow before it was excavated. Background image: A gold gorytos cover from the 4th century BC. (Care has been taken to trace the ownership of copyright material. The editors welcome any information that will enable them to rectify any incorrect or omitted reference or credit.)

men Scythians settled in the watersheds of the Danube, Dniestr, and Dn'epr, an agricultural region that had been developed since the Neolithic period.

The Crimean Peninsula and the coastal area of the Black Sea, Pontus Euxinus as it was then known, came to be occupied by the Royal Scythians, who descended from a military oligarchy that arrived from inner Asia. To the north and east of the Royal Scythians arrived the Nomad Scythians, who probably represented the last wave of Scythian migration to eastern Europe (and who eventually, sometime between the 4<sup>th</sup> century BC and the 2<sup>nd</sup> century AD, succumbed to their cousin tribes, the Sarmatians).

By the 7<sup>th</sup> century BC, the Royal Scythians had reached and ransacked the shores of the Black Sea, forcing out the local Cimmerians, who moved to Anatolia. These aristocratic Scythians were headed by a sovereign whose authority later passed to his son. In their newly conquered territories, they encountered lifestyles completely different from what they had known. They discovered a land of well-developed agriculture—an easy life compared with their own pastoral existence—and became neighbours of the Hellenes, whose merchant cities and sophisticated mythology and art appealed very much to the Scythian imagination.

Depite the inevitable skirmishes that broke out between 🕏 the two civilizations, the Hellenes intrigued the Scythians. History records numerous examples in which a conqueror is assimilated into the culture and lifestyle of a vanquished population, especially one that represents a higher standard of economy and living. Although that is not precisely the case here, the warrior Scythians did fall heavily under the influence of their Greek neighbours, and the Scythian royal family even intermarried with the Greeks during

# With the migrating herdsmen went th

### clothed, but whose wages consisted only of a sh

### The Warriors' Softer Side

Though Scythian society was for the most part patrilinear, some customs suggest an ancient matriarchy. Female deities were predominant in the Scythian pantheon and a curious birthing custom, the couvade, persisted throughout Scythian history. In this rite, a husband would "help" his wife during labour by laying down and simulating all her movements. When the child was born, it was placed in the father's bed, signifying his official recognition of the child. On the strength of this ritual, Scythian men were accused by Greeks of effeminacy. Ancient authors suggested that Scythians were cursed with the "feminine sickness" by Aphrodite as punishment for demolishing her temple at Askalon in Palestine (an act which very well might have been committed by Cimmerians, mistaken by the ancient Israelites for Scythians).

Herodotus's day, sometime in the 5<sup>th</sup> century BC.

The Scythians nevertheless maintained a distinct identity and fighting spirit, as evidenced by the battle of 339 BC when the Scythian ruler Ateas, who was then 90 years of age, was killed while fighting Philip II of Macedon, the father of Alexander the Great.

The assimilation of the Ploughmen Scythians was most likely not immediate, for they were treated as second-class citizens, both by other Scythians and by the neighbouring Hellenes. The poorest of the Scythian tribes and the most numerous, the Ploughmen eventually renounced the warrior lifestyle altogether and became exclusively an agrarian people. But the Royal Scythians embraced the Hellenic lifestyle, eagerly becoming rich city dwellers and emulating the ways of their neighbours.

The Hellenic influence is distinctly documented in Scythian gold. Before the westward migration, the iconography of Scythian art addressed animalistic mythology and was characteristically compressed and synthetic in form. In their new homeland, Scythian art began to acquire new dimensions, no doubt inspired by the peoples of the Black Sea. Intelligent and fast-learning, the Scythians soon began to create realistic renderings of people engaged in everyday activities or in combat. This new art was very suggestive, sometimes full of dynamism,

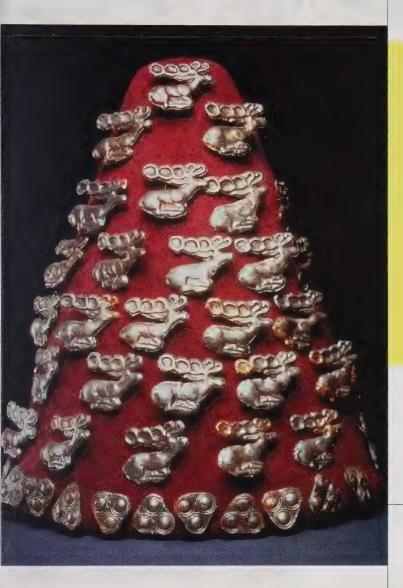


sometimes static and tender in the expression of prosaic scenes from life, but always very detailed and realistic.

In many objects, elements of Scythian iconography were masterfully combined with typical Hellenistic ornamentation. A gold and iron sword of the 4th century BC, for example, a typical Scythian weapon, is covered with Hellenistic iconography; another piece of military gear, a gorytos, used 😫 to carry a bow, is of distinct Scythian construction but is adorned with scenes from Greek mythology adorned with scenes from Greek mythology.

The rich artistic culture of the nomads, expressed chiefly in gold and silver, was in turn admired by the ancient Greeks. One can imagine their awe at the massive gold objects brought by the Scythians from their distant ancestral

### e tribes' warriors, free men who were fed and re in whatever was taken from the enemy.



lands. Many pieces must have been refashioned into jewellery that suited Greek tastes, quite remote from the "barbaric" fancies of the nomads. Evidence of this new style has been found repeatedly at many archeological sites, proving

been found repeateury at many accessory beyond a doubt the links between the two cultures.

Though the watersheds of Dn'epr, Don, and rivers were the most famous excavation sites, ma Though the watersheds of Dn'epr, Don, and Kuban' rivers were the most famous excavation sites, many other locales yielded Scythian artifacts. Excavated Scythian art is documented in many volumes, in English and French, which contain a wealth of information about the kurgans and fabulous photographs of the finely detailed gold and silver masterpieces. Today, most of these superb treasures are housed at the museums of Kiev and St. Petersburg.

### The Cult of the Stag

From the brilliant visual art discovered in the barrows of Altai, the immense permafrost zone of the mountain plateau abutting Kazakhstan, Mongolia, and China, we know of early Scythian animalist beliefs. One creature appears to have been the most highly revered: the deer, the Scythian holy beast. The image of a stag is repeated in all possible variations, hundreds of times, and in all available media—as an independent sculpture, a miniature costume applique (as seen adorning the headdress at left), and the pommel of a dagger. But the most convincing argument for the cult of the stag was a discovery made in the Pazyryk kurgan. Russian archaeologists found very well preserved headgear for a horse, a contraption of magnificent antlers worn in imitation of a deer!

Opposite Page: This sphinx earring from the 4th century BC, made of pure gold with enamel inlay, is smaller than an inch in height. The Greek lion-woman imagery indicates the Hellenic influence on Scythian art. Left: On this modern replica of a Scythian headdress, two of the stag plagues are original, dating to the late 7th to early 6th century BC.

In aesthetic terms, these artifacts are products of the highest artistic advancement; they reveal not only the artists' great technical skill but also their love of the subjects they depicted. When the Scythians assimilated Greek artistic finesse and attention to detail, they created a pictorial history through works of art in gold and silver that were unequalled in their time.

A travelling exhibition scheduled to arrive at the ROM in February 2001 will display a broad spectrum of Scythian art created on the shores of the Black Sea. The museums of Kiev have generously allowed a selection of objets d'art to travel to the ROM, most of which are characteristic of the 5<sup>th</sup> and 4<sup>th</sup> centuries BC. For the first time, these artifacts will be on display to the Canadian public, providing an opportunity to behold first-hand the mastery of Scythian artisans.



Chris Darling and Cara Gibson

# Life and Death on the Leslie Street Spit

unfolds

toid life

SUNNY WEEKENDS, Toronto's Leslie Street Spit is abuzz with inline skaters, cyclists, birdwatchers, and nature lovers. This popular "natural" peninsula was constructed from landfill dumped by the truckload beginning in the mid- '50s and continuing today. The resultant landmass has simply been left for Ontario's heartier flora and fauna to colonize. What few visitors may realize is that living in the weeds along the roadsides of the spit are insects with life histories so bizarre that even horror filmmakers would be awestruck—were they to take a closer look. . . .

In late summer, roadside fields are aglow with the brilliant yellow plumes of goldenrod plants. Often wrongly accused by allergy sufferers of causing the sneezing and wheezing associated with ragweed pollen, goldenrods (Solidago) are keystone species in old fields. Clonal plants, which grow in distinct clumps of genetically identical stems, they support complex communities of herbivorous insects, which in turn support both larger and smaller wildlife.

The most obvious of the goldenrod insects are gallmakers, which live in swellings on the plant's stems. Adult gallmakers lay their eggs on or near the goldenrod plant. When the eggs "hatch," the larvae burrow into the growing tissue of the stem. Gnawing on the plant from within, they coerce the goldenrod into producing a characteristic tumour or gall. Inside, the larvae have plenty to eat and are protected from the elements as they mature to adulthood.

On the spit, there are three types of goldenrod galls: ball, spindle, and elliptical. The ball gall houses a maggot called Eurosta solidaginis, which becomes a fly upon adulthood. The other two galls are caused by caterpillars, which metamorphose into moths; Epiblema scudderiana induce spindleshaped galls and Gnorimoschema gallaesolidaginis induce elliptical galls.

Species of goldenrod and even individual plants differ in their susceptibility to the various gallmakers in the same way that people differ in their susceptibility to the viruses that cause the common cold. Because susceptible goldenrods must devote a considerable portion of their energy to producing galls, they are at a competitive disadvantage with their resistant cousins who can put all their energy into their own growth and reproduction. Natural selection will favour those goldenrod plants that can resist the attack of gallmakers or those that, when attacked, produce only small galls. On the other

hand, gallmakers that extract the most out of the goldenrod and induce the largest galls are favoured. The net result of these conflicting demands on the plants and their gallmakers is a range of gall sizes.

But goldenrod resistance is not all that stymies the gallmakers' efforts. Their little abodes are not as safe and snug as they may seem. The inhabitants are readymade hors d'oeuvres for chickadees and woodpeckers. They are also attacked by specialized carnivores, called parasitoids. This community of tiny assassins is diverse both in number of species and in the ways by which they attack and kill their hosts. Undetected by the casual passerby, life-and-death battles are waged inside the goldenrod galls.

Each of the galls and its inhabitants illustrate a very different and fascinating tale. Ball galls show the in-









Top left: Ball galls like these intact specimens are the most common gall type at the Leslie Street Spit. Middle left: Inside the gall on the left, Eurosta solidaginis has been parasitized by Eurytoma gigantea. The gall was small enough for the female wasp to penetrate and deposit her eggs into the gallmaker within. Inside the gall on the right, Eurosta is unparasitized. Bottom: Closeup view of Eurytoma gigantea. Top right: Inside this gall, Eurosta has been killed by a different parasitoid, Eurytoma obtusiventris.

terconnected evolutionary interactions that can occur among closely associated flora and fauna. Spindle galls are a living analogue of those ever-diminishing Russian dolls (Matroyshka) that nestle so precisely within one another. And elliptical galls provide a glimpse into the bizarre lives of the minute aliens that go unnoticed on our very own planet.



Top: Seen at an early stage of development, this *Epiblema scudderiana* caterpillar has not yet produced a gall on this goldenrod stem. Middle: Inside a spindle gall, the *Epiblema* caterpillar has been attacked by the parasitoid *Macrocentrus pallisteri*, whose dark shape can be seen within the caterpillar. Bottom left: The final larval stage of *Macrocentrus* emerges from *Epiblema*. Bottom right: *Macrocentrus* is now the victim as it is attacked by the hyperparasitoid *Perilampus fulvicornis*, seen here feeding on the surface of the larger *Macrocentrus*.

### **Ball galls**

Ball calls are by far the most commonly encountered galls on the spit. Obviously, *Eurosta* are doing well, but that does not mean that they are immune to attack by parasitoids. Two species of wasp attack the ball gallmakers. *Eurytoma obtusiventris* females lay their eggs inside the eggs of *Eurosta* before they hatch.

When the *Eurosta* larva burrows into the goldenrod to initiate a gall, it is already carrying *Eurytoma obtusiventris* with it. These wasps can therefore be found inside galls of all sizes.

Eurytoma gigantea, by contrast, attacks the Eurosta maggot late in the summer, after the gall is already formed. However, only if the wasp's ovipositor (the needle-like appendage female wasps use to deposit eggs into the host) is longer than the thickness of the gall walls can the female drill into the central chamber containing the maggot. Thus, only small galls are susceptible to parasitism by Eurytoma gigantea.

Still, larger galls are no guarantee for the safety of the gallmaker either. These attract the attention of resident winter bird populations, which like to dine on the plump maggots during the lean months of mid-winter. The larger the gall, the higher the rate of predation by hungry chickadees and woodpeckers, apparently because they are easier for the birds to spot. So, variation in gall size, which is a result of the evolutionary tug-of-war between the goldenrod and Eurosta, also has dramatic effects on other species. Small galls favour the parasitoids, and large galls favour the birds. Such are the subtle interactions that characterize co-evolved biological communities.

### Spindle galls

IN EARLY SUMMER, as *Epiblema* caterpillars are contentedly chewing on the

inside walls of their gall, their nemesis, a 2-cm-long delicate orange-and-black wasp known as *Macrocentrus pallisteri*, arrives on the scene. The female wasp inserts her long ovipositor through the gall tissue directly into the caterpillar and lays an egg—it's the beginning of a slow end for *Epiblema*. The wasp eggs hatch inside the body of the caterpillar, and the resulting larvae pass through a number of developmental stages before completely devouring the caterpillar

as it begins to pupate the following spring.

Throughout the summer the larvae slowly float around in the caterpillar's body doing little harm; *Epiblema* continues to feed and grow. *Macrocentrus* larvae have huge heads, about one-third the size of their bodies, and are equipped with long, sharp recurved jaws. Although many *Macrocentrus* larvae can be found within a single caterpil-

lar during the summer months, by the following spring only one remains. The inescapable conclusion is that these larvae fight to the death, using their jaws to gnash any would-be competitors unlucky enough to have been deposited into the same host. Why fight? Because an *Epiblema* caterpillar provides only enough food to produce a single *Macrocentrus* wasp. To the victor go the spoils. In the spring, a huge *Macrocentrus* grub will burst out of the side of the caterpillar, pupate, and, if all goes well, develop into an adult wasp.

Although the Macrocentrus life cycle is interesting in its own right, there is an even smaller wasp, Perilampus fulvicornis, that attacks it. We call these parasites of other parasites "hyperparasites." Their odyssey begins in summer when the female Perilampus lays her eggs on the goldenrod stem. These hatch into minute larvae. The first instar—or stage of development-larvae seek out the Epiblema caterpillar in the developing gall. Called "planidia" (Greek for "diminutive wanderer"), they enter the developing gall through a hole in the stem made by the caterpillar in order to evacuate its plentiful excrement, or frass.

The planidia climb aboard the caterpillar and burrow their way into its body cavity. There they patiently wait, for their final destination is inside the *Macrocentrus* larva, which has not yet arrived on the scene. When it does, the planidia will burrow inside it, too. By the time the victorious *Macrocentrus* larva is ready to emerge from the still-living caterpillar the following spring, the planidia are

tucked safely beneath the parasitoid's "skin." When *Macrocentrus* has finished its final caterpillar meal, the planidia pierce through its flesh and writhe along its smooth outer surface searching for others of their kind. We have found as many as a dozen planidia on the surface of a single *Macrocentrus* larva, but only one will survive to vanquish the host. When the planidia encounter one another, yet another fight to the death ensues—which could take place on the head of a pin! The victorious *Perilampus* 

consumes the *Macrocentrus* and grows exponentially, moulting through successive stages and finally completing its development into a 3 mm-long black wasp. Nature's Russian dolls par excellence: inside the plant is the gallmaking caterpillar, inside the caterpillar is the parasitoid *Macrocentrus*, and inside the *Macrocentrus* is the hyperparasitoid *Perilampus*.

### How to Invite Aliens into Your Home

uring the winter months snow weighs down many plants, yet goldenrod stems manage to stand tall, and the distinctive tumour-like galls are plainly evident against a snowy background. A clear warm day in March is an ideal time to collect galls from roadsides and old fields. (If you're collecting galls from the Leslie Street Spit, be sure to bring a scarf—the wind off the lake can be biting.)

- Collect some galls (at least 20) and sort these by type.
- · Are they ball, spindle, or elliptical galls?
- · Open the galls and look directly inside or
- · Take them home and raise the inhabitants!

### To open

Trim each stem such that only 3 to 4 cm remain on either side of the gall. Slip a penknife into half of the stem from above or below the gall. Wedge the blade about one quarter the way into the gall and teeter the blade back and forth until the gall splits open. The fate of the gallmaker can often be determined by the contents of the gall. Was it successful? If not, what killed it? Or perhaps it will be killed when it resumes its development in the spring.

### To raise the inhabitants

Place galls in a mesh-covered container at room temperature with a little damp tissue to increase the humidity. Wait patiently! Flies, wasps, or moths will emerge in 2 to 7 weeks. If you'd like to try something really interesting, open the galls carefully, note the contents, and then fasten the galls closed again with straight pins. By checking them periodically with the aid of a hand lens or magnifying glass, you can watch each developmental stage of the host and its parasitoids. Remember to release the adult insects!

### **Elliptical galls**

By late summer, the elliptical galls caused by the caterpillar *Gnorimoschema* usually contain an empty pupal case, indicating the successful development of the moth—or the telltale signs of death by one of seven parasitoids. Three are common, and each differs dramatically in its approach to killing the host.

The largest is Sesioplex depressus, a solitary ectoparasitoid. The female wasp simply drills into the gall, stings

and paralyzes the caterpillar, and lays an egg on her helpless host. A single wasp larva consumes the host and, in late summer, spins a silken cocoon near the shrivelled remains of the caterpillar. One caterpillar, one parasitoid.

The other two, the most common of the parasitoids, are "gregarious," meaning that many wasps are able to develop at the expense of a single host. One of these is Tetrastichus paracholus. The adult wasps chew their way into the inner chamber of the gall in late summer, taking advantage of the bunghole prepared by the caterpillar to facilitate the eventual exit of the moth. Many eggs are laid into the caterpillar by the tiny Tetrastichus female and the larvae do little damage until the host begins its transformation into a moth. Taking advantage of this vulnerable

stage, approximately 20 to 30 wasp larvae completely consume the host, creating a communal "nest" within the caterpillar's pupal skin. They overwinter in the pupa and the next spring chew through this protective layer to crawl out of the gall,

mate, and continue the cycle.

In terms of host mortality, the most successful parasitoid is Copidosoma gelechiae. Copidosoma, too, is gregarious but in a very different manner. It is "polyembryonic," and, as the word suggests, development begins with multiple embryos rather like human twins or triplets. Once the female has injected her eggs into the host, they divide hundreds of times, ultimately producing hundreds of minute wasp larvae inside the caterpillar. These larvae somehow manage to commandeer the caterpillar's growth and development, and do not allow it to pupate. The caterpillar becomes monstrously bloated and continues to feed and grow long after it should have metamorphosed into a moth, producing more food for the hungry horde of parasitoids. When the caterpillar nears its end, hundreds of wasp larvae writhe within rice-grain-sized cells inside its body. In late summer, they pupate and the adult wasps chew their way out of the host's remains. The females search for freshly laid moth eggs in which to oviposit and start the macabre cycle again. Adequate material for any *X-Files* episode!

Nestled away in the tranquility of the Leslie Street Spit, and everywhere that goldenrod is found, there are prime examples of the precise and intricate web of life and death that characterizes intact bi-

ological communities. Tritrophic interactions—the flow of energy captured from the sun by plants, to herbivores, and ultimately to carnivores—organize these communities and are providing biologists with valuable insights into questions not only about the maintenance of biodiversity but also about the restoration of habitats degraded by human activities. The lowly goldenrod continues to be a gold mine of information as ecologists struggle to understand and protect biological communities. \*







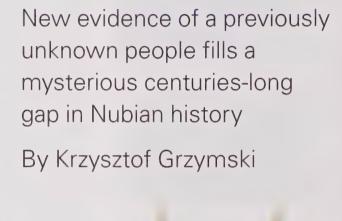




Top left: Inside this elliptical gall is the pupa of Gnorimoschema gallaesolidaginis, evidence of its successful metamorphosis into a moth. But much can go wrong. This pupa (top right) has been attacked by Tetrastichus paracholus. Inside, 20 to 30 Tetrastichus parasitoids have consumed the host. The closeup is of Tetrastichus larvae. Bottom left: This Gnorimoschema caterpillar has become monstrously bloated after being attacked by Copidosoma gelechiae. Bottom right: Copidosoma adult emerges from Gnorimoschema.

# Nubia







Above: Shawabties—like this figure of King Aspalta c. 590 – 560 BC—were magical figures placed in the tombs of the Kushite rulers, a practice borrowed from Egypt.

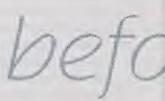
Right: A ROM excavation site at Hambukol in the Letti Basin.

nlike the magnificent pyramids, tombs, and temples of Egypt, those found in Nubia, the land a journalist once called "The Nile's Other Kingdom," are scarcely known to the public. But for researchers, this ancient territory remains a land of archaeological promise.

Nubia once stretched along the river Nile between the modern-day cities of Khartoum in Sudan and Aswan in Egypt. During the 1960s, Lower Nubia, a region between the First and Second Cataracts of the Nile, was extensively explored in anticipation of the high dam being built near Aswan that would completely inundate the area. The local population was resettled and many of the ancient monuments, including the famous rock-cut temples at Abu Simbel, were dismantled and relocated to new sites and museums.

But before that happened, discoveries made at sites such as Meroe and Gebel Barkal revealed the existence of an ancient sophisticated, literate, urban society. Ruins of walled cities, monumental temples, and stone pyramids still adorn the landscape in the unflooded part of Nubia. Yet, because the intense field research largely ignored the middle Nile region of Upper Nubia (located in today's Central





### CULTURE, ART AND DESIGN



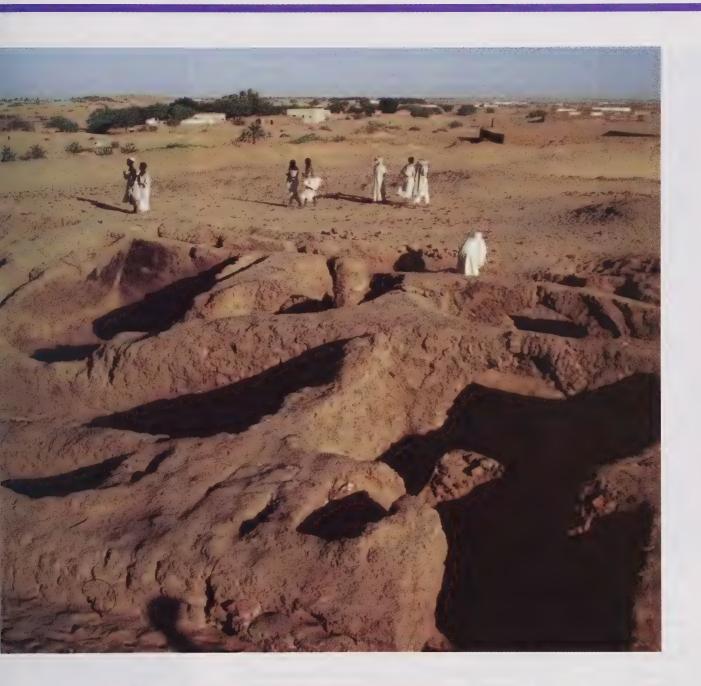






These potsherds found in Nubia's Letti Basin were Egyptian imports.

BRIAN BOYLE, ROM



# re the pyramids

# These modest remains were clearly the relics of pre-Napatan Nubians, people who were no doubt the ancestors of the great rulers of Kush







Top: Satellite image of the Letti Basin area. Bottom: Map of Africa shows the parameters of ancient Nubia.

Right: Smaller and more slender than their Egyptian counterparts, Nubian pyramids still dot the landscape around Napata and Meroe in Sudan. Sudan), our knowledge of what was one of the greatest civilizations of Africa remains scanty. Only a handful of sites in Upper Nubia have been excavated. New sites and whole new cultures are still being unearthed there by archaeologists, including researchers from the ROM.

In recent years another irrigation scheme has been developed to convert the sandy "island" between the Nile and an extinct river channel known as Khor Letti into an agricultural zone with new fields and settlements. At the request of the local antiquities officials, and prompted by our own research need for a regional survey, a ROM team began a comprehensive survey of the Letti Basin.

Although our mandate covers all the time periods from the Palaeolithic right through until Islamic times, I was particularly interested in searching for material from the "Kushite" period (800 BC – AD 350). I was intrigued by the apparent lack of sites in the Letti Basin dating to this era, referred to by some scholars as the "Napatan-Meroitic" period. It was during this time that Nubia reached its peak of political, cultural, and artistic development as exemplified by the magnificent jewels found during the 1830s in the royal pyramids of Meroe.

We know that around 750 BC the Kushite kings of Nubia conquered Egypt and ruled there for almost a century. They are listed in Egyptian history books as the XXVth Dynasty. The Nubian kings adopted the Old Kingdom Egyptian custom of erecting pyramids as their burial places, and this tradition survived in Nubia until the end of Meroitic times. Much smaller than their Egyptian counterparts, but slender and elegant, Nubian pyramids still dot the landscape in the neighbourhood of Napata and Meroe, the political and religious centres of Kush.

Sometime during the third century BC, the Kushites invented their own writing system. Visually and phonetically, the characters were based on Egyptian signs but their number was limited to 23, as this was largely an alphabetic system. Meroitic writing is the second oldest in Africa, and because the phonetic values of the signs have been identified, scholars can read the texts. Even so, the actual meaning of the words still eludes us. The numerous examples of Meroitic writing on display in the ROM's Nubian Gallery include an interesting inscription written in a combination of Egyptian and Meroitic hieroglyphs that was found by our team in the Letti Basin. The decipher-







These pre-Napatan and early Napatan potsherds were locally made finewares.

BRIAN BOYLE, ROM



ment of the Meroitic language presents one of the greatest challenges in the field of Nubiology.

Another is pinpointing when and where this great Nubian civilization emerged. We know that between approximately 2500 and 1550 BC the Nubian Nile Valley was ruled by the kings of Kerma, a city near the Third Cataract. The Kerma Kingdom was subsequently conquered by Egypt's New Kingdom pharaohs, who ruled in Nubia until 1080 BC. The remains of Egyptian towns and temples are relatively common in Upper Nubia, but—rather surprisingly—no archaeological indications of the native population have ever been found. It is clear from Egyptian texts and tomb paintings that there was a substantial local Nubian population—yet, it is as if these people vanished into thin air.

Even more puzzling is the total lack of data concerning the period between the Egyptian withdrawal from Nubia and the appearance of the Napatan–Meroitic civilization around  $85\circ$  BC.

I was particularly frustrated that in many years of work in the Letti Basin we had failed to identify any Egyptian sites or artifact assemblages, save for the occasional scarab. Nor had we been able to discover any remains left by the post-Kerma/pre-Napatan Nubians, a seven-centuries long gap.

Our area of investigation is strategically located in the great bend of the Nile, halfway between the major ancient Egyptian sites of Gempaten (modern Kawa) and Napata (modern Gebel Barkal).

This region is significant as a gateway to the savannah lands of Africa, which can be reached through the system of wadis (dry riverbeds) that join the Nile Valley here. We know from the wall paintings and reliefs found in the tombs of Egyptian high officials in Thebes (modern Luxor) that the Nubians regularly sent a tribute to the pharaohs. The typical Nubian tribute scene found in Egyptian tombs depicts rings of gold as well as elephant tusks, leopard pelts, live giraffes, and other African animals that were brought to Egypt from or through Upper Nubia. Who was hunting these animals? Could it have been the founders of the great Napatan-Meroitic Kingdom?

Until recently, some scholars thought that most of Nubia was depopulated under Egyptian rule. Others, including myself, felt that the area between the Third and Fourth Cataracts was governed by native rulers, who were essentially vassals of the Egyptian pharaohs and posed no threat



Above: Meroitic script, like the example on this tombstone, is the second oldest written language in Africa.

### ROM's Work in Nubia: The Cultural Context

TELD RESEARCH IS AN IMPORTANT PART of the Museum's mandate as it enhances the scholarly quality of the galleries and often leads to the enrichment of the collections. The Sudanese government has given several generous gifts of artifacts in recognition of the ROM's role in researching and preserving Nubian history. But our presence in Sudan is also important for other, non-scholarly reasons. For a war-torn country often savaged by Nile floods and other natural disasters, an archaeological field project offers much-sought-after employment opportunities both for the local population and for displaced people. Much of our field work in Sudan is therefore of developmental assistance to the country, and has been recognized as such not only by the Sudanese antiquities authorities but also by CIDA and by UNESCO, which has designated the Royal Ontario Museum's project an official activity of the United Nation's Decade for Cultural Development.



Above: A local assistant to the Letti project commutes to work.

Right: Krzysztof Grzymski carries out conservation work on a medieval wall painting in Hambukol.

Bottom right: Krzysztof Grzymski beside the altar of the temple of Amun in Meroe. to the Egyptian empire. It must have been these local chiefs and princes who eventually founded the Kingdom of Kush at Napata. Much of this was pure speculation until our recent discoveries in the Letti Basin.

Many archaeological sites in this part of Nubia are heavily eroded by wind. Often, an occasional scatter of potsherds is all that remains of an ancient village or camp. That was the case with Letti site ROM 204. It was barely recognizable on the desert surface: a concentration of small potsherds, stone tools, and bits of fired clay was all that remained. What piqued my curiosity was that the potsherds were of a kind not previously encountered in this area. Some of them were clearly Egyptian "marl wares"; others were totally unfamiliar.

It is remarkable that these unprepossessing remains of the ancient world play such a crucial role in archaeological investigations. Differences in the style and motifs of pottery decoration, vessel shape, and clay composition allow researchers to distinguish and date various cultures. The ceramic assemblages we found at ROM 204 were various: they comprised thin, polished, hand-made red wares; brown undecorated coarse wares; brown potsherds with finger impressions; and fine green wares, obviously of Egyptian origin. Certain stylistic similarities could be detected between the very late Kerma pottery and the Napatan pottery. These similarities and the fact that the assemblages contained fragments of Egyptian pottery and even scarabs suggests that the site was datable to the period of Egyptian occupation. The predominance of local wares pointed towards the native Nubian origin of the material. Could this be evidence of the very people we had been hoping to trace?

After completing surface studies, we excavated parts of the site. The work was more reminiscent of prehistoric research in Europe and North America than of the traditional uncovering of major structures prevalent in Nile Valley sites. Rather than the large-scale removal of accumulated sand in order to unearth massive walls, we had to carefully scrape the layers of soil and sieve every shovelful of sand









## The Letti Basin Chronicles

HE ROM'S FIELD WORK IN NUBIA HAS been carried out in several stages, reflecting as much our practical and scholarly needs as the availability of funding. From 1984 to 1986 we conducted a rapid surface survey to identify archaeological remains on both banks of the Nile between Khandaq in the north and Debba in the south, a stretch of about 80 kilometres.

We followed this with several seasons of excavations at the medieval settlement of Hambukol. A whole "lost city" was buried under Saharan sands, and large parts of it, including a church and a monastery, were uncovered by our team. Hambukol was one of several large mounds of the Christian period (6th-14th century) discovered by our expedition. These were once flourishing cities and villages, described by 10th-century Arab envoy and writer Ibn Selim al-Aswani as "about thirty villages with beautiful buildings, churches and monasteries, many palm trees, vines, gardens, cultivated fields and broad pastures on which one can see very fine camels." They were eventually abandoned by their inhabitants and covered by the shifting desert sands. Our discovery of a church, a monastery, and other buildings, in addition to the discoveries made by a Polish team at the nearby site of Old Dongola, appear to confirm al-Aswani's description of the Letti area in medieval times. It is worth mentioning that the Hambukol monastery is one of only a handful actually identified in the field.

Equally important, and even unique, are some of the objects found by the ROM team at Hambukol. The so-called "magic bowls" inscribed with the names of the 12 apostles and 72 disciples of Jesus Christ, are the only such bowls ever found in the Nile Valley. Similar protective or magic bowls were previously known only from Mesopotamia and many are displayed in the Museum's Levant Gallery. Another exciting find is a funerary stele of a Nubian official named Mariankouda. The text, written in Greek, contains a previously unknown funerary formula as well as important information about Nubia in the 9th century. We learned, for example, that Mariankouda held the office of tetrarch of Makuria (a medieval name for Upper Nubia), an administrative title not previously encountered.

and dust. Through this method, we uncovered the remains of ovens, outlines of huts, and traces of pits and silos. Potsherds were mixed with animal bones, fragments of grinding stones, occasional beads, and lumps of daub. Charcoal, ashes, and animal bones filled the interiors of the ovens.

When tested in a radiocarbon laboratory, a charcoal sample gave us a date of 1000 to 800 BC for the material from Letti site ROM 204. These modest remains were clearly the relics of pre-Napatan Nubians. These people no doubt were the ancestors of the great rulers of Kush—the conquerors of Egypt and builders of the pyramids at Napata and Meroe.

In order to confirm the existence of the "Letti phase" of the Kushite culture we must continue our work. It is something of a paradox that, having just worked with the magnificent art objects currently displayed in the exhibition Egyptian Art in the Age of the Pyramids, I dream of returning to Nubia to continue work on the humble domestic remains. Yet, in some ways, knowledge of the life and activities of the ordinary Egyptians and Nubians is equally as fascinating as the study of the royal monuments at Giza, Meroe, or Napata.



This stele marking the tomb of Mariankouda was discovered at the Hambukol site on a previous expedition.

Above: These pre-Napatan and early Napatan potsherds were locally made drabwares.

# 

## Fashion Victims of 18th-century England



In the mid-18th century, all the fine and decorative arts were informed by one another, and the theatre played an important role in creating and disseminating stereotypes such as the macaroni. The Nymphenberg porcelain figure representing Octavio, shown right, from the collection of The Gardiner Museum of Ceramic Art in Toronto, typifies the characteristics of the mincing fop who had long featured on the English stage. The macaroni built upon an earlier prototype, the "fribble."

Octavio, modelled by F. A. Bustelli, hard-paste porcelain, Germany, Nymphenburg, c. 1755 – 60, 18 x 9.7 x 7.6 cm





HE AXIOM THAT fashion has its price was never more true than for the ultra-chic men of

1760—1780 England called "macaronies." These well-to-do and well-travelled young men, characterized by their flamboyant French court dress worn in everyday life, formed a significant part of contemporary culture and, in their heyday, were a highly topical social type.



## By Peter McNeil



As well as spotting "real" macaronies on the streets—figures including the explorer Sir Joseph Banks, the politician Charles James Fox, the society painter Richard Cosway, and former Black slave "Soubise"—people could view macaroni caricatures in shop windows, read macaroni joke books, watch macaroni types in plays, mingle with them at masquerades, and inspect



Left: The caricatures are 18th-century
French etchings and engravings on laid paper by an anonymous artist. Typical of the
period is the mocking focus on elaborate
coiffures. From left to right: La Brillante
Toillete de la Déesse du Gout, c. 1770;
Le Diner misterieux, c. 1770; L'Incendie
des Coeffures, c. 1770.

Above: The macaroni love of the colour green has links forward to the time of Oscar Wilde's "green carnation" circle.

Care has been taken to trace the ownership of copyright material. The editors welcome any information that will enable them to rectify any incorrect or omitted reference or credit. ) anity was the beginning and the end of Sir Walter Elliot's character;

vanity of person and of situation."

Jane Austen, Persuasion.

porcelain figure groups of their assemblies. But life as a macaroni wasn't all glamour: the mode of dress provoked ridicule among contemporaries and accusations of Papism in the streets; some of the French fabrics favoured by the macaronies were illegal and subject to confiscation if detected at customs; and the style was, in the end, deemed unhealthy and a threat to masculinity itself.

The look that inspired such vitriol was the newly fashionable short and tight French court dress consisting of elaborate silk or velevet coat, waistcoat, and breeches, dress sword adorned with a large tassel, red high-heeled shoes, high toupée wig, and a tiny hat of a type called "Nivernois" after the French ambassador in London. Silk stockings, spotted or striped, were a distinguishing part of the ensemble as were aristocratic props such as a snuff box or a huge cane. Paint, powder, and scent were applied liberally. The macaroni "persona" was also marked by an emphasis on performative and mannered gestures and postures.

The term "macaroni" first appears in 1764 in a letter written by author Horace Walpole in which he discusses gambling losses among visiting sons of foreign aristocrats at London's "Maccaroni [sic] club, which is composed of all the travelled young men who wear long curls and spying-glasses." Walpole is referring to the young noblemen who had taken the Grand Tour of Europe, and indeed the name macaroni may have derived from the taste for noodles encountered abroad, but it also referred to a form of burlesque poetry that merged Latin and vernacular forms. It was in this aristocratic sub-culture that macaroni style originated.

Derived from contemporary French and Italian fashion, macaroni finery was downright lavish compared to the garments typically worn in England at the time. By wearing the high-style court garments in everyday life rather than the more comfortable frock

coat and breeches in modest wools and chamois adopted by most nobility, macaronies asserted their pre-eminent wealth and privilege over the imported Hanoverian court. This raised the ire of many Eng-

pre-eminent wealth and privilege over the imported Hanoverian court. This raised the ire of many Englishmen who viewed the macaroni's adoption of court dress in everyday life as a throw-back to those periods of English history when Francophile and Jacobite sympathies were strong. England was uncompromisingly Protestant in complexion in the 18th century, and colourful display of any kind tended to be associated with Roman Catholic pomp and Bourbon autocracy.

Macaronies were further scorned by contemporaries for espousing continental mores rather than unpretentious English values. The original macaronies frequented the club-land of St. James's Square, where gaming was highly fashionable and losses reached epidemic proportions—macaroni Charles James Fox's stakes of £3000 in one sitting were public knowledge. Gambling was associated with French manners and became the focus of much critical literature.

But despite, or perhaps because of this poor reputation, the macaroni's chic proved enticing to many young men, and the style reached beyond the wayward

## Waistcoats Made the Man



Elaborate Waistcoats were a defining mark of the macaroni. Among the ROM's large collection from the period, one waistcoat (shown at right), is intriguing from both a technical and a historical perspective. Its intricate luxury is classic macaroni. Both brocaded and embroidered, it incorporates a winding band brocaded in pink silk and silver <code>frise</code> with floral sprays brocaded in coloured silks and chenilles and embroidered with silver <code>file</code>, sequins, and coils of silver wire.

This particular waistcoat almost exactly matches the one depicted in Thomas Gainsborough's portrait Captain William Wade, 1771 (above), which hangs in the Bath Assembly Rooms. Its elements correspond with all the details that became the subject of exaggeration in caricature. As Master of Ceremonies in Bath from 1769 to 1777, Wade was responsible for enforcing rules of dress and decorum in the ultra–fashionable resort. Gainsborough paints Wade in a red velvet suit with lavish gold–embroidered waistcoat, black silk wig–bag, nosegay, toupée wig, and fine lace. Wade adopts the aristocratic posture of a balletic turned foot and arms akimbo. His face registers considerable hauteur. The "pose" of the macaroni is very much in evidence.



Opposite page, left: This English men's coat of the 1770s is made in the favourite macaroni colour green and embroidered in detail. Inset: Detail of English men's embroidered waistcoat of the 1770s.

Opposite page, right: This English or French men's suit from c.1780 shows the oversized buttons favoured by the macaroni. Above: A gold silk lampas waistcoat, French c. 1760–70, from the ROM's collection, almost exactly matches the one depicted on Gainsborough's painting of Captain William Wade, shown left.

In sidebar:
Captain William Wade
(d. 1809)
(oil on canvas)
by Thomas Gainsbourough
(1727 – 88)

t was difficult at a small distance to tell the real from the false."

Charles Dickens, The Pickwick Papers

sons of the aristocracy. In a society with increasing access to cheaper versions of fashionable goods, macaroni affectations came to be adopted by courtiers who were not high-born but could nonetheless afford copies of the expensive fashions. In class-conscious England, this middle-class adoption of the perquisites of their social superiors rankled with some onlookers. But, as the writer Samuel Johnson's case indicates, aspects of the macaroni pose were eventually embraced by even less affluent men who found the fashion alluring. As the young Johnson had to leave London each weekend for lack of a decent suit, it is evident that elements such as the hairstyle were sufficient to mark one out as macaroni. Throughout the later 1760s and 1770s, popular culture would associate the term with any man who aped foreign fashion and manners, no matter what his class or occupation.

Interest in elaborate clothing would have been further stirred by the Royal Wedding of the future Louis XVI and the Archduchess Maria-Antonia (Marie-Antoinette), which was held in Paris in May 1770 and attended by a number of English macaronies. During the era of macaroni style, the large-patterned brocades of the 1740s and 1750s were replaced by smaller effects. In many cases naturalistic decoration of plants and flowers crept up the edges of the coat, which might also be sprigged all over with buds, insects, and leaves, with buttons embroidered en suite. Fine embroidery was expensive and sought after, but the most luxurious fabrics were often those incorporating woven motifs, the most magnificent of which originated in France and Italy. Foreign embroidery and fabrics were banned in England (See "Made in England," Rotunda Spring 1998), although this may have made them doubly irresistible to the macaroni. Because French clothing was illicit, it may have provoked fury on the streets of London for reasons of mercantile patriotism in addition to the broader questions of status and display. In 1770, new wardrobe items ordered from Paris by prominent macaroni Charles James Fox were seized by customs and burned. It is not known if he was also fined the standard £200 penalty. Macaroni Walter Stanhope's diary records his dismay at the seizure of a pair of plum-coloured silk breeches from Paris, part of a suit that was to be embroidered in silver. No similar silk could be found in England to match the top, so the suit was wasted.

Some macaronies derived such pleasure from the pursuit of fashion that it was almost an end in itself. The competition in ostentation was most decidedly feverish. Macaroni Lord Bolingbroke wrote, probably in jest, in a letter requesting a Paris suit:

A small pattern seems to be the reigning taste amongst the Macaronis at Almack's, and is, therefore, what Lord B. chooses. . . As to the smallness of the sleeves, and length of the waist, Lord B. desires them to be outré, that he may exceed any Macaronis now about town, and become the object of their envy.

A suit of such small-patterned fabric can be found in the ROM's textile collections, a garment made of silk brocade in a diaper weave with tinsel threads brocaded in golden brown, probably dating from the late 1770s to early 1780s. The suit features over-sized buttons, a mark of macaroni dress in the late 1770s when huge steel or jewelled buttons were fashionable. Shoe buckles at that time also became hugely mannered. Both the ROM and The Bata Shoe Museum hold excellent examples of massive steel and paste "Artois"

## Fashion was in the Wig-Bag



A SPECTACULAR SUIT from the ROM's collection is this rare ermine-trimmed and partly fur-lined French ribbed silk suit dating from c. 1780 (also shown at right). One very interesting detail is the attached black satin wigbag with large ribbon rosette to prevent pomade and powder from staining the silk. The elaborate decoration of the wig-bag indicates the energy invested in such details of men's dress. The bag is weighed with husks to keep it flat and was probably stitched on at a later date, when the suit may have been used for fancy dress or as a theatre costume. The cut of surviving suits contributes much to understanding the swagger of macaroni dress.

buckles. In the late 1770s, macaroni fashions became progressively tighter and more mannered, and sartorial accoutrements such as buttons and buckles were manipulated and scrambled in ways that suggested the clothing had become self-referential, almost parodic.

Particular colour schemes were favoured by the macaroni, most notably green and pink. Horace Walpole wrote in 1775: "If I went to Almack's and decked out my wrinkles in pink and green like Lord Harrington, I might still be in vogue." That same year,



Opposite page: Macaroni shoe buckles, like these examples from The Bata Shoe Museum, became hugely mannered in the late 1770s. The massive steel and paste ornaments were known as "Artois" buckles. Above: This English or French coat c. 1780 made of silk with ermine trim would have satisfied the macaroni lust for finery. It also shows the detail of a black silk wig-bag, which was likely added at a later date.

Matrimonial Magazine noted a "most unseasonable rage for GREEN CAPES," a fad alluded to by Samuel Johnson, in a letter describing his new coat:

This day I had a new great Coat which am exceedingly pleas'd with; it is a light colour with a light green collar, made in the new fashion; the colour of the Coat depends on one's own fancy but the green capes are almost universal..."

A humble half-waistcoat in the ROM's collection is of great historical interest because it indicates provincial adaptations of urban sophistication. In that favoured macaroni colour, green, it shows the patterning of stripes, which was so often caricatured.

Within costume history macaroni style tends to be approached from the realm of caricature. This is not surprising considering that as the style began to flourish, so the genre of satire was emerging in the world of arts and letters. The macaroni became a favoured target. Spoofs frequently focused on the distinctive hairstyle, which rose to a lofty toupée in the front and included a huge club wig or pigtail behind, generally wrapped in a silk wig-bag (a bag, held in place with ribbons, which contained the tail of the wig so its pomade would not stain the fabric of the suit) and garnished with a massive bow. The coiffures of the macaroni's French counterpart, the petit-maître, received the same contemptuous treatment.

The macaroni's ornate waistcoat was likewise singled out for ridicule. Though the waistcoat was historically considered a prestigious item of couture, maintaining a link with ancien-régime dress well into the 19th century, the over-elaborate version came to epitomize, at least in 18th-century sources, a vain and fashionable man.

By virtue of their flamboyant dress and behaviour, macaronies were sometimes viewed by perplexed onlookers as men who were attracted to the same sex. Indeed, there are links forward from the macaroni love of the colour green to Oscar Wilde's circle (the green carnation) and the New York "pansy" of the 1930s when green suits were the badge of the homosexual. In the early 1770s, macaronies were frequently discussed in the middle-class press as an indeterminate or "amphibious" gender. Although macaronies were not by definition interested in same-sex contact, the popular press perpetuated that view by describing several prosecutions for sodomy as a direct consequence of "macaroni" behaviour. The 1772 case of military commander Captain Robert Jones was reported to result from "shocking vices . . . imported from France and Italy" and linked specifically to macaroni tastes.

The late 18th century was a time of rapid transformation of gender roles, and the fussiness of macaroni dress inspired discussion of English definitions of male behaviour. The style eventually fell out of favour in Eng-

land for a complex mix of social factors from politics to Rousseauan philosophy to medicine. The very cut and silhouette of male court garments was criticized by Rousseau and other philosophes as enfeebling, threatening the potency of the male population. The constraints of court dress, the argument went, denied the "natural" man and were symbolic of the control imposed by a debilitated and effeminate court society.

These philosophers made connections between the enervating luxury of a decaying Imperial Rome and the state of contemporary French society. Laid over this critique was an attack on the role of women at court, who, it was claimed, had made men into lapdogs and imposed a society obsessed with the fashionable and the inane. Aristocratic dress, with all its ostentatious trappings, was a feminized practice at odds with masculine democracy, the philosophes argued.

The medical discourse of the time further contributed to the embattled macaroni's demise. The new discussion of masculine health, initiated by French doctors and scientists and promoted in England in the late 18th century, was influential in encouraging a shift away from those favoured macaroni fabrics, silk and velvet, which were characterized as unwashable, impervious to air circulation, and hence unhealthy. A move towards the greater use of woolen broadcloth and cotton was encouraged as being more hygienic. Marrying Rousseauan notions of freedom and ease of movement to new medical ideas about the circulation of the blood and the free functioning of the pores, French doctors such as Des-Essartz, Vandermonde, and Clairian criticized paint, powder, and luxury in general. Clairian went so far as to submit that court dress compressed the male sexual organs and diminished their size.

In England, Walter Vaughan merged science with anxiety over the male social role in An Essay, Philosophical and Medical Concerning Modern Clothing (1792). Vaughan laments, "Alas! if our venerable ancestors were but raised from the dead to see their posterity disguised so hideously with paint, powder, and several other articles of dress, they might be led to ask 'Where is a Man?'"

The notion of moderation was thus embraced as the essential of English male attire. Fanny Burney had already noted in 1775 that the word macaroni was no longer the "ton"; the very name had lost its cachet. By the 1780s the style was vanquished. The macaroni was consigned to the role of bit player in the novels of Jane Austen and Charles Dickens, portrayed as an ailing and ridiculous fop generally resident in Bath, and completely at odds with youthful male fashionability.

If you are interested in reading further about men's costume throughout history, contact http://users.aol.com/nebula5/costume.html. See "Male Attire."

#### **CULTURE, ART AND DESIGN**

# THE DYEING GAME

 $A\ custom\ dye\ job\ and\ nimble\ needle work\ restore\ an\ 18th-century\ kimono\ to\ its\ original\ splendour$ 

ISTINGUISHED BY its long sleeves, which can articulate a subtle semaphore of amorous significance, the furisode is a style of kimono that became popular in Japan during the late Edo period (1603-1867). Though it was considered chic apparel for young women as well as for entertainers, who have a tendency to push the boundaries of fashion in any culture, this kimono would have been considered highly inappropriate attire for a married woman.

Before the ROM's beautiful 18th-century example could join the Far Eastern paintings, works on paper, and textiles on display in the Herman Herzog Levy Gallery, it required treatment for damage. Agnes Krippendorf, an intern on temporary placement at the ROM, undertook the work in the Museum's textile conservation laboratory under the supervision of Esther Méthé.

The ROM's furisode was made principally from a soft damask known as rinzu, typical of the Edo period. The fabric first appeared as an import from China, but was soon copied by Japanese weavers. It is distinguished # by a motif of orchids and chrysanthemums, called rangiku, set against a

key-fret pattern, known as 🗟 sayagata. The white material was further embelii lished using a resist-dyeing method called shibori.

In this technique, pattern areas are reserved through pleating, compressing, or stitching. When the fabric is im-





mersed in the dye bath, the reserved areas are untouched by colour. Two different types of shibori were employed on the ROM's kimono: kanoko (fawn spot) shibori, produced the clusters of white circles with red dots that com-

AGNES KRIPPENDORF AND ESTHER MÉTHÉ

prise the bamboo foliage, plum blossoms, and pine trees; and bôshi (capped) shibori was used to reserve the

Left: This beautiful furisode was restored for display in the ROM's new Herman Herzog Levy Gallery. Below: The padded hem had been degraded by exposure

larger area of the white pine trees and plum blossoms.

to bright lights.

Gold-thread embroidery had been applied to enhance the shibori patterns. Silk-core threads were wrapped with gilded paper, paired, and then couched to outline the white plum blossoms and the edges of the pine trees. The gold thread was also used to create blossoms. Stems and floral details were stitched in red and green silk floss.

The trio of pine, bamboo, and plum motifs is called shôchikubai-or the "Three Friends of Winter"because the pine and bamboo remain green in winter and the plum can blossom

in the snow. Individually, each has a specific meaning: the pine symbolizes longevity and consistency; the bamboo, rectitude and resilience; and the plum, harmony and happiness. Together they represent happiness and

> good fortune. Since the late Edo period shôchikubai motif has typically been used for wedding garments.

When the Museum's kimono was removed from storage, we could see that the fabric had suffered severe degradation along the padded





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COMING IN THE FALL 2000 ISSUE

OTUNDA

# As Time Goes By

Freelance writer Mark Sabourin looks at the human mind's concepts of time.



hem on its lower edge. We also noticed that the silk under the ROM accession number, which was sewn to the hem on a label, was unfaded and more stable. It appeared that much of the damage had occurred, regrettably, after the kimono's acquisition, probably during earlier display under bright lights. These days, Museum goers may find the galleries dim at times because the intensity of illumination is now carefully monitored to prevent the severe damage that can be visited on light-sensitive artifacts. Silk is particularly susceptible to light damage. In addition to the faded colours, some of the fibres on the ROM's kimono had been completely destroyed, leaving holes with fraying edges.

After consultation with the curator, we decided to reinforce the weak areas and to protect them from further loss. We began by dyeing a similar-weight silk fabric to match the colour of the kimono. Replicating colours with dye is a long but ultimately rewarding process when the match succeeds. We placed the newly dyed silk behind the holes in the kimono's hem to back them and to support the fraying edges. We used hair silk, to sew the pieces in place.

Once the damaged area was stabilized, we covered the entire hem with silk crepeline, a sheer fabric, which had also been dyed to match. We then inspected the kimono to locate loose gold threads. We found them throughout the garment. These threads quickly twist together when detached, and gentle handling was required to untangle them and sew them back into place.

The furisode is now on display as part of the Levy Gallery's inaugural exhibition, Man's World/Woman's World in Japan and China, its vibrant colours alive once more for the public to enjoy.

Agnes Krippendorf is an intern on temporary placement from her conservation training at the Fachhochschule in Köln, Germany. Esther Méthé is a textile conservator in the Conservation Department of the Royal Ontario Museum.

#### **CULTURE, ART AND DESIGN**

# Marks of Distinction

How hallmarks identify silver

#### **Dear ROM Answers,**

A couple of years ago, I picked up this hip flask at a garage sale for \$5. Recently, I have been trying to identify its markings. I now know from the hall-marks that it was made in Sheffield in 1918–1919. The marks include the British Crown for Sheffield, the lion passant for sterling standard silver, and the letter "A" in a shield indicating that particular year. I am now trying to find out what the initials G & J over WH in the large shield stand for. I assume that these are the actual silversmiths, but I cannot find these initials in any books.

The flask is 15.2 cm (6 inches) tall and 9 cm (311/16 inches) wide. It is glass with a hinged spherical cap 6.3 cm (21/2 inches) in diameter and is covered in alligator leather with a slit in the side to check the contents. The oblong silver cover that fits over the bottom comes off and can be used as a drinking cup. The hallmarks are struck on the mounts for the spherical cap, just under the cover, and on the side of the cover fitting over the bottom. I was told by the lady who sold it to me that it had belonged to her father-in-law, Dr. Jim Melvin. I'm hoping that you can discover what the initials stand for and tell me a bit more about my hip flask.

J. L., KINGSTON, ONTARIO

#### Dear Reader,

You have made a very good purchase. This is a better quality hip or pocket flask from the early 20th century, a time when people liked to carry a bit of liquor with them for drinks or to ward off the cold. Flasks of this quality are typically Eng-





lish products, although one does not see them very often nowadays. Early in this century, fine quality bags, luggage, purses, and even picture frames were made from reptile leather for more affluent consumers. I often encounter whole tables of this material being sold as second-hand and vintage goods at flea markets in England.

Ross MacCulloch, assistant curator of herpetology in the ROM's Centre for Biodiversity and Conservation Bi-

#### PETER KAELLGREN

ology, has examined your photograph and confirms that the leather is alligator. The rectangular scales indicate that the leather came from the reptile's belly. Crocodile leather is distinguished by small pits that are visible on the body scales. Both types of leather would have been available to manufacturers in England at the time, although today, such articles may be on the restricted list with customs in certain countries to protect these animals in their natural state.

Unfortunately, I have not been able to identify G & J over WH. This is the mark of the manufacturer or retailer. In the past, it was called the maker's mark, but that has been questioned by recent researchers who have discovered that in Britain, silver articles were often marked and/or retailed by silversmiths or companies that did not make them. Until fairly recently, British law did not allow contemporary marks to be published out of concern that they might fall into the hands of forgers. However, this mark does not affect the value of most 20th-century pieces of British silver unless it is an object of exceptional craftsmanship and unusual design by a recognized designer or craftsman.

You have correctly identified the other marks. Hallmarking on British silver was rigorously enforced from the Middle Ages onwards. This was to ensure that all silver and gold was inspected for quality craftsmanship when it came to the assay office and that the metal was of a standard that could be melted down and converted into coins in times of national distress. Substandard pieces were destroyed, and the guild member submitting the work might be tried and fined for the offence.

Many fine pieces of British silver



are on display in the Samuel European Galleries until fall 2000 as part of the exhibition Silver: The Sterling Choice — Silver from the Norman and Marian Robertson Collection. The show highlights a recent gift to the ROM.

Silver is a very popular subject with the museum audience. At least once a week, I receive an enquiry resulting from the silver Web page on the ROM's Internet site. I also receive many letters like yours. Now may be a good time to share some basic information with our readers. I have compiled a brief list of some of the best resources for researching silver hallmarks (see below).

British hallmarks are among the easiest to decipher because the marking system was well established by the 1700s and most silver found on the market dates to later than that. British hallmarks include a symbol for the city in which the assay office was located; a mark indicating the standard of the metal (usually a lion passant for ster-

# A GUIDE TO RESEARCHING SILVER HALLMARKS

he best source for checking silver hallmarks is Jackson's Silver & Gold Marks of England, Scotland & Ireland, edited by Ian Pickford (Woodbridge, Suffolk: The Antique Collectors' Club Ltd., 1989). Since London was a major manufacturing and retailing centre, London Goldsmiths 1697–1837; Their Marks and Lives by Arthur Grimwade (London: Faber & Faber, 1990) is a tremendous resource for antique silver and includes brief biographies of the men and women who used the marks.

For more recent pieces, John Culme has written The Directory of Gold & Silversmiths, Jewellers & Allied Traders 1838–1914 in two large volumes profusely illustrated with marks (Antique Collectors' Club, 1987). Kenneth Crisp Jones produced The Silversmiths of Birmingham and their Marks 1750-1980 (London: N.A.G. Press, Ltd., 1981), which is a great resource because so much was manufactured there, tunately, nothing similar has been compiled for Sheffield. There are also specialized books on silver for Ireland, Scotland, the Channel Islands, and the city of Chester.

The one book that I have found the most helpful for identifying European silver is *International Hallmarks on Silver Collected by Tardy* (Paris: Tardy, 1981 and later editions). Tardy illus-

trates a very useful range of country, city, and standard marks right up to recent years. There are numerous books by the Kovels and others on American silver marks as well as specialized monographs on topics like Tiffany silver and Gorham silver made in Providence, Rhode Island.

Canadian marks have been published by the late John E. Langdon, whose collection of silver is found in the Canadiana Department of the ROM, in the book Canadian Silversmiths & Their Marks 1667–1867 (Lunenburg, Vermont: Stinehour Press, 1960).

For electroplate, both Canadian and U.S. marks are illustrated with brief histories of the companies in the Encyclopedia of American Silver Manufacturers (fourth edition), by Dorothy T. Rainwater and Judy Redfield (Atglen, PA: Schiffer Publishing Ltd., 1998). Not all trademarks and manufacturer's marks are illustrated. Seymour B. Wyler illustrated a useful range of English marks in The Book of Sheffield Plate (New York: Crown Publishers, 1949). Occasionally, when a company made or retailed both silver and electroplate, I have been able to identify the mark with the help of the two volumes by John Culme listed above.

-P.K.

ling or 92.5 percent standard); a letter for the date; and the mark of the maker, manufacturer, or retailer. These marks changed over the years and sometimes additional marks were struck, perhaps to indicate that duty had been paid or to coincide with a coronation or a royal jubilee.

Silver made in Europe is not always as well marked or as easy to identify. After 1870, silver manufactured in Europe and Russia was often struck with a mark of .800 or .833, indicating that it was of lower standard than sterling, ranging anywhere from 80 to 83 per cent pure silver in the alloy. In the Canadian and U.S. markets, "sterling" has become the most common mark since the 1860s.

The majority of my silver enquiries, however, concern electroplate. This is a silver substitute made from copper, Britannia Metal (a tin alloy similar to pewter), and brass or other base metal alloy that has been plated with a thin layer of pure silver using an electric current. This manufacturing technol-

ogy did not come into general use until the 1850s. Commonly encountered marks include "EPNS" for electroplated nickel silver where the base metal alloy is whiter and made with nickel; "EPBM" for electroplated Britannia Metal; and "A1" or "Quadruple Plate," which are commonly found marks on electroplate made around 1900 and indicate that the object was covered with a thicker than normal layer of pure silver. Impressed production, inventory, or model numbers may also appear. Electroplate marks are not always easy to identify, particularly English ones, as little has been published since 1949, and there were numerous manufacturers in England.

Although most of this information will not likely help you, it may assist some of our readers. Thank you for sharing your flask with ROM Answers.

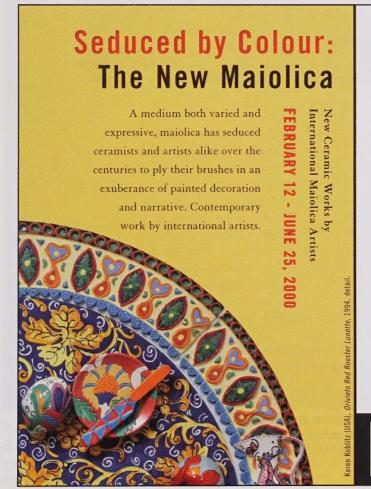
Peter Kaellgren is curator in the ROM's Department of Western Art and Culture, specializing in British and European decorative arts from 1500 onwards.

## WE'D LIKETO HEAR FROM YOU

If you own furniture, silver, glass, metalwork, ceramics, textiles, or small decorative objects that may have an interesting past and have aroused your curiosity, this column is for you. Send a clear colour photograph (or 35-mm colour slide) of the object against a simple background, providing dimensions, a description, any markings, or any known details of its history to: ROM Answers, c/o Rotunda Magazine, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario M5S 2C6. Be sure to enclose a stamped, self-addressed envelope large enough to include any photos that must be returned to you.

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*nhu (moonflask)*, porcelain, Qianlong mark and period, 18th century. Photo: Lorraine



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# A ROOM WITH A VIEW

In the 1970s, dinosaurs roamed the ROM library



JOINI AUCUI

books and journals, the ROM's main library had served as a dinosaur gallery, the remnants of which can be seen in the wall murals by G. A. Reid, which illustrate "Life Through All the Ages." The late Reverend Charles Long, a pas-

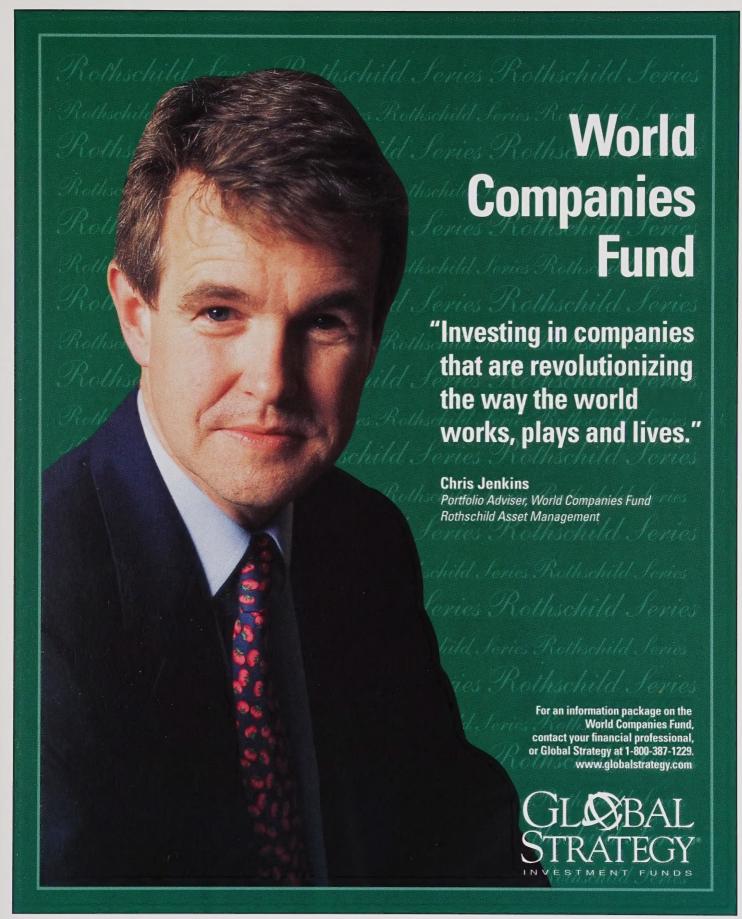
#### JULIA MATTHEWS

sionate ornithologist, is seen hard at work in the room in the late 1970s. In the current library, now located on the Museum's main floor, the pictured lamps and display racks are still in use. And, although the library no longer houses live hermit crabs (which, if you look closely, you can see in their glass case under the gooseneck lamp at the back of the photo), live scarab beetles will soon be on display as the library is

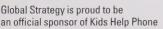
transformed into a relaxing Oasis Lounge in conjunction with the exhibition *Egyptian Art in the Age of the Pyramids*.

Julia Matthews has been head of the ROM's Library and Archives since 1983.

If you remember such an occasion at the ROM, or an exhibition that has stayed with you across the years, send us your reminiscences at info@rom.on.ca.



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